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April 29, 2015

Ms. Christine Medley
Bio Defense Specialist / PHEP Coordinator
FMIT Office of Emergency Response
500 Merriman Avenue
Needles, California 92363

Re: First Quarter 2015 Groundwater Monitoring Report
Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

EPA Site ID FTMO-005
EN TECH Project No. 2789

Dear Ms. Medley:

Enclosed is the ***First Quarter 2015 Groundwater Monitoring Report*** (Report) for the above referenced facility. Included within is a description of the activities performed by Environmental Technology, Inc. (EN TECH®) on behalf of the Fort Mojave Indian Tribe from January 2015 through March 2015. Those activities included groundwater monitoring, free product checks, and groundwater sampling.

If you have any questions or require additional information with regard to this project, please contact me at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "C. D. Miller".

Carney D. Miller, AEP, CIPS
Senior Project Manager

Enclosures

cc: File



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FIRST QUARTER 2015 GROUNDWATER MONITORING REPORT

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

EPA Site ID FTMO-005

EN TECH Project No. 2789

April 29, 2015

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Carney D. Miller, AEP, CIPS
Senior Project Manager

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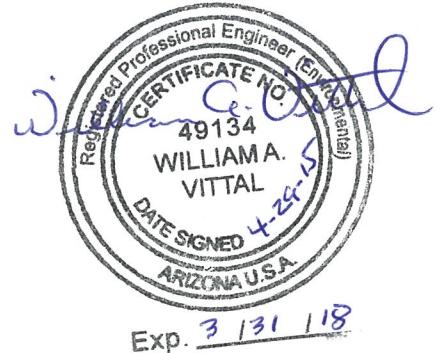


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INTRODUCTION

This Report documents and discusses the activities performed by Environmental Technology, Inc. (EN TECH®) at the Fort Mojave Smoke Shop from January 2015 through March 2015. The Fort Mojave Smoke Shop is located at 8501 South Highway 95, Mohave Valley, Arizona. See Figures 1 and 2 for a Site Vicinity Map and a Site Plan drawing. Field activities performed by EN TECH during the reporting period included the field measurement of groundwater levels, measurement of free product levels, and sampling and laboratory analysis of groundwater from the facility's monitoring wells. The field activities were performed as requested in US EPA Region IX correspondence ***Long-term Release Response and Corrective Action for UST Systems-Groundwater Monitoring Required, Fort Mojave Smoke Shop, Mohave Valley, AZ (EPA Site ID: FTMO-005)***, dated January 14, 2014.

On March 5, 2015, a conference call was held between representatives from the Fort Mojave Indian Tribe, US EPA Region 9, and EN TECH. The purpose of this conference call was to respond to the email sent to Fort Mojave Indian Tribe, discuss current site conditions, additional data requests and evaluation, and modification of the current groundwater monitoring/sampling protocol. In response to that conference call the following information is provided;

- EN TECH will begin quarterly groundwater depth to water/free product check field activities, in lieu of monthly monitoring activities, beginning in the Second Quarter of 2015 (April through June).
- EN TECH initiated the use of low-flow groundwater monitoring well purging/sampling methodology in March 2015.
- EN TECH has included in this Report log-distance plots of the estimated lateral extent of the groundwater contaminant plume.
- EN TECH has included in this Report information regarding potential down-gradient Public Water Supply (PWS) wells and private wells.

- EN TECH is currently evaluating various options for possible remedial actions based on the findings of the low-flow groundwater sampling technique and analytical results which will be included in the Second Quarter 2015 Groundwater Monitoring Report.

WATER LEVEL MONITORING

EN TECH personnel measured water levels in each of the facility's monitoring wells on January 26, February 19, and March 18, 2015. Water level measurements were made to a surveyed reference point, located at the north side of the top of each well casing, using a product/water interface probe or equivalent device. Water level measurements and calculations of groundwater elevations are summarized in Table 1. Figure 3 presents a hydrograph of groundwater elevations. Figures 4, 5, and 6 contain groundwater contour maps for the January 26, February 19, and March 18, 2015 groundwater elevations.

EVALUATION OF WATER LEVEL DATA

For the reporting period, the maximum groundwater elevation (GWE) of 464.73 feet above mean sea level (amsl) occurred in MW-2 on March 18. The minimum GWE of 464.33 feet amsl occurred in MW-6 on February 19. The maximum average GWE of 464.70 feet amsl occurred on March 18, while the minimum average of 464.36 feet amsl occurred on February 19.

Table 2 is a summary of groundwater gradient calculations for the entire project. As Table 2 indicates, the average groundwater gradient, for this reporting period, ranged from south 25.6° east at 0.00032 feet per foot on January 26, 2015, to south 28.8° east at 0.00036 feet per foot on February 19, 2015. For all monitoring events, the groundwater flow direction averages south 51° east with a maximum variance of 41° clockwise of average and 63.5° counterclockwise of average.

GROUNDWATER SAMPLING

EN TECH collected compliance groundwater samples from wells MW-1 through MW-7 on March 18, 2015. Pursuant to discussions in a March 5, 2015 conference call between US EPA,

Fort Mojave Indian Tribe, and EN TECH personnel, EN TECH used low-flow purging methodology for well purging and sampling. Prior to sampling, EN TECH personnel checked for the presence of free product and measured the depth-to-water (DTW) in each monitoring well. The equipment used for this low-flow purging/sampling event included a GeoPump™ II peristaltic pump, YSI® 556 multi-probe system (MPS), LaMotte 2020 Turbidimeter, and a Solinst® 122 Interface Probe (IP). EN TECH used a length of new ¼ inch polyethylene tubing for each well. The tubing was premeasured and marked so that the bottom of the tubing was set approximately 12 inches below the top of the water column in each well. All field instrumentation was field calibrated/verified with the appropriate standard prior to use. The purging equipment was set up such that the discharge tubing from the peristaltic pump flowed into a flow-through cell which housed the YSI probes. The groundwater purge rate was calculated by discharging the purge water into a graduated cylinder over a timed period. During the groundwater purging activities, the DTW was continuously monitored with the Solinst IP. Additionally, groundwater purge parameters, including dissolved oxygen (DO), oxidation reduction potential (ORP), turbidity, conductivity, pH, and temperature, were continuously monitored during the purging activities. The aforementioned purge parameters were recorded at approximate 5-minute intervals and a sample was collected approximately every 5 minutes for turbidity measurement. Purging activities continued until the purge parameter data met stabilization criteria as noted on the purge parameter data sheets. Once the purge parameter stabilization criteria had been met groundwater samples were collected for laboratory analysis. Leaving the pump running, the discharge tubing was disconnected from the flow-through cell inlet. The groundwater samples were then collected by letting the purge water flow directly from the discharge tubing into laboratory-supplied containers. Groundwater samples were labeled and stored in an ice chest containing sufficient ice to reduce and maintain sample temperature at 4 degrees Celsius. Samples were transported and relinquished to Orange Coast Analytical Laboratory (Orange Coast) using the laboratory-supplied chain-of-custody documentation. The purge water was placed into 55-gallon steel drums and staged on-site for pending disposal.

All samples collected from the monitoring wells for laboratory analysis were analyzed by Orange Coast for gasoline-ranged organic (GRO) compounds using EPA Method 8015D and for volatile organic compounds (VOCs) using EPA Method 8260B. Copies of the laboratory reports and chain-of-custody documentation are provided in Appendix A. Field parameter measurements for the March low-flow purging and sampling event can be found in Appendix B. A summary of groundwater monitoring data for the entire project can be found in Appendix C. The summary includes water and product level measurements, calculations of groundwater elevation, and analytical results for the chemicals-of-concern (COCs).

EVALUATION OF GROUNDWATER SAMPLE DATA

For the March 2015 sampling event, the Orange Coast laboratory report indicates that no GROs or VOCs were detected, above laboratory minimum reporting levels (MRLs), in the samples collected from MW-2, 3, 4, 5, 6, and 7. This data is consistent with previous laboratory analyses. The reported GRO concentration in the sample collected from MW-1 was 11,000 micrograms per liter ($\mu\text{g}/\text{L}$). Benzene, ethylbenzene, and toluene were reported at concentrations of 700 $\mu\text{g}/\text{L}$, 330 $\mu\text{g}/\text{L}$, and 2,300 $\mu\text{g}/\text{L}$, respectively, in the sample collected from MW-1. Each of these concentrations exceeds their respective federal Maximum Contaminant Level (MCL). Xylenes were reported at a concentration of 700 $\mu\text{g}/\text{L}$ in MW-1, which is below the MCL. 1,2,4-Trimethylbenzene and 1,3,5-trimethylbenzne were reported at concentrations of 120 $\mu\text{g}/\text{L}$ and 110 $\mu\text{g}/\text{L}$; however, neither of these constituents has an MCL. No other constituents were reported in the sample from MW-1 although there were elevated detection limits due to sample dilution required for analysis.

The reported COC concentrations in MW-1, from the March 2015 sampling event, are significantly lower than in most previous sampling events. However, the data from March 2015 is similar to a sample collected on April 10, 2014. The sample from April 2014 was a grab sample, no purging, that was collected merely for verification purposes due to a suspected mislabeling between samples from MW-1 and MW-5. The significance of the similarity of these two (2) data points cannot necessarily be determined from one sampling event. However, the

data indicate that the low-flow purging method may produce different results than more aggressive purging. This could be due to the fact that purging more water at higher flow rates draws water from a larger volume around each well. Whereas, the low-flow purging method produces a water sample from the immediate vicinity of the well. EN TECH notes that MW-1 is actually located outside of, and up-gradient of, the former UST pit. Therefore, the higher COC concentrations previously reported in samples from MW-1 are likely the result of drawing a larger proportion of contaminated groundwater from inside the former UST excavation.

The same scenario may be true for samples collected from MW-5 which is located down-gradient from the former UST pit area. The historic analytical data from MW-5 has been split between sampling events when no COCs were reported and events when COCs have been reported. The analytical data from the March 2015 event, using the low-flow purging method, indicated that no COCs were detected above MRLs. Initially, we believed variances in dissolved COC concentrations in MW-5 were entirely the result of a fluctuating water table intermittently contacting the smear zone in the soil; leading to the conclusion that the smear zone and the groundwater contaminant plume extends to MW-5. While that interpretation may be the entire explanation for the variance in COC concentrations, an alternative interpretation of the data is that more aggressive purging activities pull contaminated water from the down-gradient edge of the groundwater contaminant plume nearer the former UST excavation resulting in higher COC concentrations.

The groundwater analytical data from March 18, 2015 is presented in Table 3. The groundwater analytical data from the December 22, 2014 sampling event is presented in Table 4 for comparison. Isoconcentration maps, depicting the reported GRO and benzene concentrations from the March sampling event, are presented in Figures 7 and 8, respectively.

EN TECH has also prepared log-distance plots for GRO and benzene based on the December 2014 groundwater sample results (see Figures 9 and 10). As noted above, GRO and benzene concentrations were less than MRLs in MW-5 during March. Based on December's sample

results, the log-distance plot predicts compliance with 100 µg/L for GRO at 193 feet from MW-1 and compliance with 5 µg/L for benzene at 325 feet from MW-1. If an additional well is to be installed, EN TECH recommends placing the well along the average groundwater flow direction line as indicated on Figures 9 and 10. However, in light of the intermittent nature of contamination in samples collected from MW-5, and the possibility that sample technique may be influencing sample results, EN TECH does not recommend installation of additional monitoring wells at this time. EN TECH will continue to provide log-distance plots to be included with the future groundwater monitoring reports. The reports will include updated analysis and recommendation on the need for additional groundwater monitoring wells.

FREE PRODUCT

Free product has been periodically detected in MW-1. Previous free product recovery activities included the use of passive skimmers and hydrophobic absorbent socks. No free product was detected with the interface probe, nor was any free product recovered during this reporting period. Free product has not been detected in MW-1 since December 18, 2013. EN TECH will continue to monitor for the presence of free product and conduct additional free product recovery activities as needed.

RECEPTOR SURVEY

EN TECH has researched readily ascertainable groundwater well registration records through the Arizona Department of Water Resources for potential public water supply (PWS) wells and private wells located within a ¼ mile radius from the point of release (former UST pit) and within calculated groundwater flow direction variances. EN TECH has identified 11 well registration records that indicate they are within the search criteria described above (see Figure 11). Of these 11 identified well registration records, only one (1) well appears to be associated with a PWS. This well is owned by Willow Valley Water (aka Global Water) and is located approximately 580 feet east of the point of release. This Willow Valley Water well, which has been previously identified in receptor search information, is not in service. The wellhead exists, however, there is no pumping infrastructure connected to it. The remainder of

the identified wells appear to be privately owned—the nearest of which is estimated to be 650 feet southeast of the point of release. Tabulated information regarding the identified wells is presented in Table 5.

It is EN TECH's understanding that the area subject to this receptor search is serviced by Willow Valley Water/Global Water as a potable water utility. It is unknown how many water service connections Willow Valley Water/Global Water has within the subject area. EN TECH reviewed available public records and did not locate any public information indicating that any Willow Valley Water/Global Water wells had been affected by the release from the former UST system.

FUTURE FIELD ACTIVITIES

EN TECH will continue to conduct groundwater sampling on a quarterly basis. EN TECH will monitor depth-to-water and check for free product in all on-site groundwater monitoring wells, during the scheduled groundwater sampling events. The next quarterly groundwater monitoring and sampling event is scheduled to be conducted in June 2015. The next quarterly groundwater monitoring report is scheduled to be submitted in July 2015. Should free product be detected in any of the wells, free product recovery activities will be conducted to the extent practicable.

LIMITATIONS

Environmental Technology, Inc. has performed the tasks outlined in this project report in accordance with generally accepted practices and consistent with the level of work performed by other consultants providing similar services in Arizona at the time of the investigation. No warranty, expressed or implied, is made. This report is not a complete chemical characterization of the property, and is not to be construed in the whole or as part as "due diligence inquiry" as specified in the Superfund Amendment and Reauthorization Act of 1986, (SARA), as amended.

TABLES

Table 1. Water Level Measurements & Calculations

Date		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Avg	Min	Well ID	Max	Well ID
	TOS	6	6	6	7	7	7	8					
	TD	37	36	37	38	37	37	38					
10/28/13	SE	482.53	482.96	482.58	482.69	482.33							
	DTW	16.73	17.01	16.59	16.72	16.41			16.69	16.41	MW-5	17.01	MW-2
	DTP	16.69							16.69	16.69	MW-1	16.69	MW-1
	PT	0.04							0.04	0.04	MW-1	0.04	MW-1
	CDTW	16.70							16.70	16.70	MW-1	16.70	MW-1
	GWE	465.83	465.95	465.99	465.97	465.92			465.93	465.83	MW-1	465.99	MW-3
11/11/13	SE	482.53	482.96	482.58	482.69	482.33							
	DTW	16.84	17.24	16.84	16.98	16.66			16.91	16.66	MW-5	17.24	MW-2
	DTP	16.81							16.81	16.81	MW-1	16.81	MW-1
	PT	0.03							0.03	0.03	MW-1	0.03	MW-1
	CDTW	16.82							16.82	16.82	MW-1	16.82	MW-1
	GWE	465.71	465.72	465.74	465.71	465.67			465.71	465.67	MW-5	465.74	MW-3
12/09/13	SE	482.53	482.96	482.58	482.69	482.33							
	DTW	17.23	17.63	17.24	17.38	17.04			17.30	17.04	MW-5	17.63	MW-2
	GWE	465.30	465.33	465.34	465.31	465.29			465.31	465.29	MW-5	465.34	MW-3
12/18/13	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.32	17.71	17.32	17.46	17.11	16.18	16.46	17.08	16.18	MW-6	17.71	MW-2
	DTP	17.27							17.27	17.27	MW-1	17.27	MW-1
	PT	0.05							0.05	0.05	MW-1	0.05	MW-1

TOS is top of screen in feet below surface elevation.

TD is total depth in feet below surface elevation.

SE is surveyed surface elevation in feet above mean sea level.

DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

Avg is average value.

Min is minimum value.

Max is maximum value.

Table 1.
 Page 1 of 4

Table 1. Water Level Measurements & Calculations

Date		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Avg	Min	Well ID	Max	Well ID
	CDTW	17.28							17.28	17.28	MW-1	17.28	MW-1
	GWE	465.25	465.25	465.26	465.23	465.22	465.20	465.22	465.23	465.20	MW-6	465.26	MW-3
01/07/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.50	17.90	17.53	17.67	17.31	16.39	16.66	17.28	16.39	MW-6	17.90	MW-2
	GWE	465.03	465.06	465.05	465.02	465.02	464.99	465.02	465.03	464.99	MW-6	465.06	MW-2
01/08/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.53	17.93	17.55	17.70	17.33	16.42	16.69	17.31	16.42	MW-6	17.93	MW-2
	GWE	465.00	465.03	465.03	464.99	465.00	464.96	464.99	465.00	464.96	MW-6	465.03	MW-2
02/26/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.73	18.12	17.76	17.91	17.54	16.61	16.87	17.51	16.61	MW-6	18.12	MW-2
	GWE	464.80	464.84	464.82	464.78	464.79	464.77	464.81	464.80	464.77	MW-6	464.84	MW-2
03/19/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.52	17.93	17.54	17.69	17.34	16.41	16.69	17.30	16.41	MW-6	17.93	MW-2
	GWE	465.01	465.03	465.04	465.00	464.99	464.97	464.99	465.00	464.97	MW-6	465.04	MW-3
04/10/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.56	17.97	17.58	17.73	17.39	16.47	16.74	17.35	16.47	MW-6	17.97	MW-2
	GWE	464.97	464.99	465.00	464.96	464.94	464.91	464.94	464.96	464.91	MW-6	465.00	MW-3
05/14/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.57	17.99	17.59	17.74	17.42	16.50	16.78	17.37	16.50	MW-6	17.99	MW-2
	GWE	464.96	464.97	464.99	464.95	464.91	464.88	464.90	464.94	464.88	MW-6	464.99	MW-3
06/12/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					

TOS is top of screen in feet below surface elevation.

TD is total depth in feet below surface elevation.

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DTP is depth-to-product in feet.

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Table 1.
 Page 2 of 4

Table 1. Water Level Measurements & Calculations

Date		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Avg	Min	Well ID	Max	Well ID
	DTW	17.65	18.03	17.67	17.83	17.48	16.57	16.82	17.44	16.57	MW-6	18.03	MW-2
	GWE	464.88	464.93	464.91	464.86	464.85	464.81	464.86	464.87	464.81	MW-6	464.93	MW-2
07/22/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.04	17.44	17.06	17.23	16.88	15.96	16.21	16.83	15.96	MW-6	17.44	MW-2
	GWE	465.49	465.52	465.52	465.46	465.45	465.42	465.47	465.48	465.42	MW-6	465.52	MW-2
08/13/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	16.88	17.28	16.90	17.06	16.72	15.80	16.07	16.67	15.80	MW-6	17.28	MW-2
	GWE	465.65	465.68	465.68	465.63	465.61	465.58	465.61	465.63	465.58	MW-6	465.68	MW-2
09/15/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	16.70	17.11	16.69	16.84	16.55	15.65	15.94	16.50	15.65	MW-6	17.11	MW-2
	GWE	465.83	465.85	465.89	465.85	465.78	465.73	465.74	465.81	465.73	MW-6	465.89	MW-3
10/28/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.49	17.91	17.51	17.66	17.34	16.43	16.71	17.29	16.43	MW-6	17.91	MW-2
	GWE	465.04	465.05	465.07	465.03	464.99	464.95	464.97	465.01	464.95	MW-6	465.07	MW-3
11/21/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.69	18.11	17.72	17.87	17.52	16.60	16.88	17.48	16.60	MW-6	18.11	MW-2
	GWE	464.84	464.85	464.86	464.82	464.81	464.78	464.80	464.82	464.78	MW-6	464.86	MW-3
12/22/14	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.99	18.39	18.01	18.16	17.81	16.88	17.16	17.77	16.88	MW-6	18.39	MW-2
	GWE	464.54	464.57	464.57	464.53	464.52	464.50	464.52	464.54	464.50	MW-6	464.57	MW-2
01/26/15	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					

TOS is top of screen in feet below surface elevation.

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DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

Avg is average value.

Min is minimum value.

Max is maximum value.

Table 1.
 Page 3 of 4

Table 1. Water Level Measurements & Calculations

Date		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Avg	Min	Well ID	Max	Well ID
	DTW	18.11	18.52	18.14	18.29	17.93	16.99	17.27	17.89	16.99	MW-6	18.52	MW-2
	GWE	464.42	464.44	464.44	464.40	464.40	464.39	464.41	464.41	464.39	MW-6	464.44	MW-2
02/19/15	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	18.15	18.57	18.19	18.34	17.98	17.05	17.32	17.94	17.05	MW-6	18.57	MW-2
	GWE	464.38	464.39	464.39	464.35	464.35	464.33	464.36	464.36	464.33	MW-6	464.39	MW-2
03/18/15	SE	482.53	482.96	482.58	482.69	482.33	481.38	481.68					
	DTW	17.82	18.23	17.85	18.00	17.64	16.71	16.98	17.60	16.71	MW-6	18.23	MW-2
	GWE	464.71	464.73	464.73	464.69	464.69	464.67	464.70	464.70	464.67	MW-6	464.73	MW-2

TOS is top of screen in feet below surface elevation.

TD is total depth in feet below surface elevation.

SE is surveyed surface elevation in feet above mean sea level.

DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

Avg is average value.

Min is minimum value.

Max is maximum value.

Table 1.
Page 4 of 4

Table 2. Summary of Groundwater Gradient Calculations

Date	Max	Well ID	Min	Well ID	Magnitude	Direction	Direction	Mag Var	Dir Var
10/28/13	465.99	MW-3	465.83	MW-1	0.00069	65.5	N 65.5 E	0.00024	-63.5
11/11/13	465.74	MW-3	465.67	MW-5	0.00053	95.0	S 85 E	0.00008	-34.0
12/09/13	465.34	MW-3	465.29	MW-5	0.00036	107.7	S 72.3 E	-0.00009	-21.3
12/18/13	465.26	MW-3	465.20	MW-6	0.00028	127.4	S 52.6 E	-0.00018	-1.6
01/07/14	465.06	MW-2	464.99	MW-6	0.00035	148.5	S 31.5 E	-0.00010	19.5
01/08/14	465.03	MW-2	464.96	MW-6	0.00034	143.6	S 36.4 E	-0.00011	14.6
02/26/14	464.84	MW-2	464.77	MW-6	0.00046	170.0	S 10 E	0.00001	41.0
03/19/14	465.04	MW-3	464.97	MW-6	0.00032	132.5	S 47.5 E	-0.00013	3.5
04/10/14	465.00	MW-3	464.91	MW-6	0.00041	127.5	S 52.5 E	-0.00004	-1.5
05/14/14	464.99	MW-3	464.88	MW-6	0.00051	109.9	S 70.1 E	0.00005	-19.1
06/12/14	464.93	MW-2	464.81	MW-6	0.00063	149.5	S 30.5 E	0.00017	20.5
07/22/14	465.52	MW-2	465.42	MW-6	0.00057	149.5	S 30.5 E	0.00012	20.5
08/13/14	465.68	MW-2	465.58	MW-6	0.00053	134.7	S 45.3 E	0.00007	5.7
09/15/14	465.89	MW-3	465.73	MW-6	0.00076	90.6	S 89.4 E	0.00031	-38.4
10/28/14	465.07	MW-3	464.95	MW-6	0.00056	106.7	S 73.3 E	0.00010	-22.3
11/21/14	464.86	MW-3	464.78	MW-6	0.00037	124.5	S 55.5 E	-0.00008	-4.5
12/22/14	464.57	MW-2	464.50	MW-6	0.00037	138.7	S 41.3 E	-0.00008	9.7
01/26/15	464.44	MW-2	464.39	MW-6	0.00032	154.4	S 25.6 E	-0.00013	25.4
02/19/15	464.39	MW-2	464.33	MW-6	0.00036	151.2	S 28.8 E	-0.00010	22.2
03/18/15	464.73	MW-2	464.67	MW-6	0.00035	152.4	S 27.6 E	-0.00010	23.4
			Avg		0.00045	129.0	S 51 E		
			Min Mag Var		-0.00018				
			Max Mag Var		0.00031				
			CCW Dir Var		-63.5				
			CW Dir Var		41.0				

Min and Max Mag Var are the maximum negative and positive variation from average magnitude.

CCW Dir Var and CW Dir Var are the maximum counter clockwise and clockwise variation from average flow direction.

Table 2.

Page 1 of 1

Table 3. Summary of Laboratory Analysis of Groundwater Samples
March 18, 2015

COCs	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Max	Well ID	MCLs
GRO	11,000	<100	<100	<100	<100	<100	<100	11,000	MW-1	100
Benzene	700	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	700	MW-1	5.00
n-Butylbenzene	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			NE
sec-Butylbenzene	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			NE
Ethylbenzene	330	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	330	MW-1	700
Isopropylbenzene	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			NE
MTBE	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			NE
Naphthalene	<300	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0			NE
n-Propylbenzene	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			NE
Toluene	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2,300	MW-1	1,000
1,2,4-Trimethylbenzene	120	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	120	MW-1	NE
1,3,5-Trimethylbenzene	110	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	110	MW-1	NE
Xylenes	700	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	700	MW-1	10,000

All values reported in micrograms per liter.

All samples analyzed using EPA Methods 8015D and 8260B.

Bolded and italicized values exceed method reporting limits.

Bolded and shaded values exceed regulatory standards.

MCLs is Maximum Contaminant Levels.

NE means regulatory value not established.

Table 3.
 Page 1 of 1

Table 4. Summary of Laboratory Analysis of Groundwater Samples
December 22, 2014

COCs	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	Max	Well ID	MCLs
GRO	25,000	<100	<100	<100	2,100	<100	<100	25,000	MW-1	NE
Benzene	3,200	<0.50	<0.50	<0.50	570	<0.50	<0.50	3,200	MW-1	5.00
n-Butylbenzene	<200	<1.0	<1.0	<1.0	<20	<1.0	<1.0			NE
sec-Butylbenzene	<200	<1.0	<1.0	<1.0	<20	<1.0	<1.0			NE
Ethylbenzene	1,600	<1.0	<1.0	<1.0	290	<1.0	<1.0	1,600	MW-1	700
Isopropylbenzene	<200	<1.0	<1.0	<1.0	<20	<1.0	<1.0			NE
MTBE	<200	<1.0	<1.0	<1.0	<20	<1.0	<1.0			NE
Naphthalene	<600	<3.0	<3.0	<3.0	<60	<3.0	<3.0			NE
n-Propylbenzene	<200	<1.0	<1.0	<1.0	<20	<1.0	<1.0			NE
Toluene	8,900	<1.0	<1.0	<1.0	<20	<1.0	<1.0	8,900	MW-1	1,000
1,2,4-Trimethylbenzene	420	<1.0	<1.0	<1.0	140	<1.0	<1.0	420	MW-1	NE
1,3,5-Trimethylbenzene	<200	<1.0	<1.0	<1.0	32	<1.0	<1.0	32	MW-5	NE
Xylenes	2,100	<2.0	<2.0	<2.0	370	<2.0	<2.0	2,100	MW-1	10,000

All values reported in micrograms per liter.

All samples analyzed using EPA Methods 8015D and 8260B.

Bolded and italicized values exceed method reporting limits.

Bolded and shaded values exceed regulatory standards.

MCLs is Maximum Contaminant Levels.

NE means regulatory value not established.

Table 4.
 Page 1 of 1

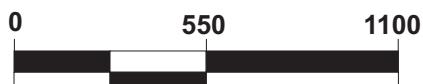
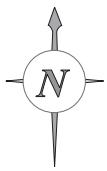
Table 5. ADWR Well Registration Information

Map ID Number	ADWR Registration Number	Total Depth in Feet	Screen Length in Feet	Year Drilled
1	55-603951	100	Unknown	1960
2	55-557718	85	5	1996
3	55-584740	85	5	2001
4	55-521828	85	5	1988
5	55-563210	90	5	1997
6	55-521279	85	5	1988
7	55-519143	85	5	1987
8	55-567854	90	5	1998
9	55-514439	85	5	1986
10	55-531155	90	5	1991
11	55-589484	85	5	2001

See Figure 11 for the general locations of these registered wells.

Table 5.
Page 1 of 1

FIGURES



Scale: 1 inch = 550 feet

Note: All locations and boundaries are approximate.

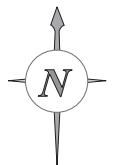


SITE VICINITY MAP

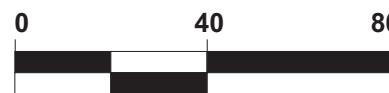
Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

Project # 2789
April 2014

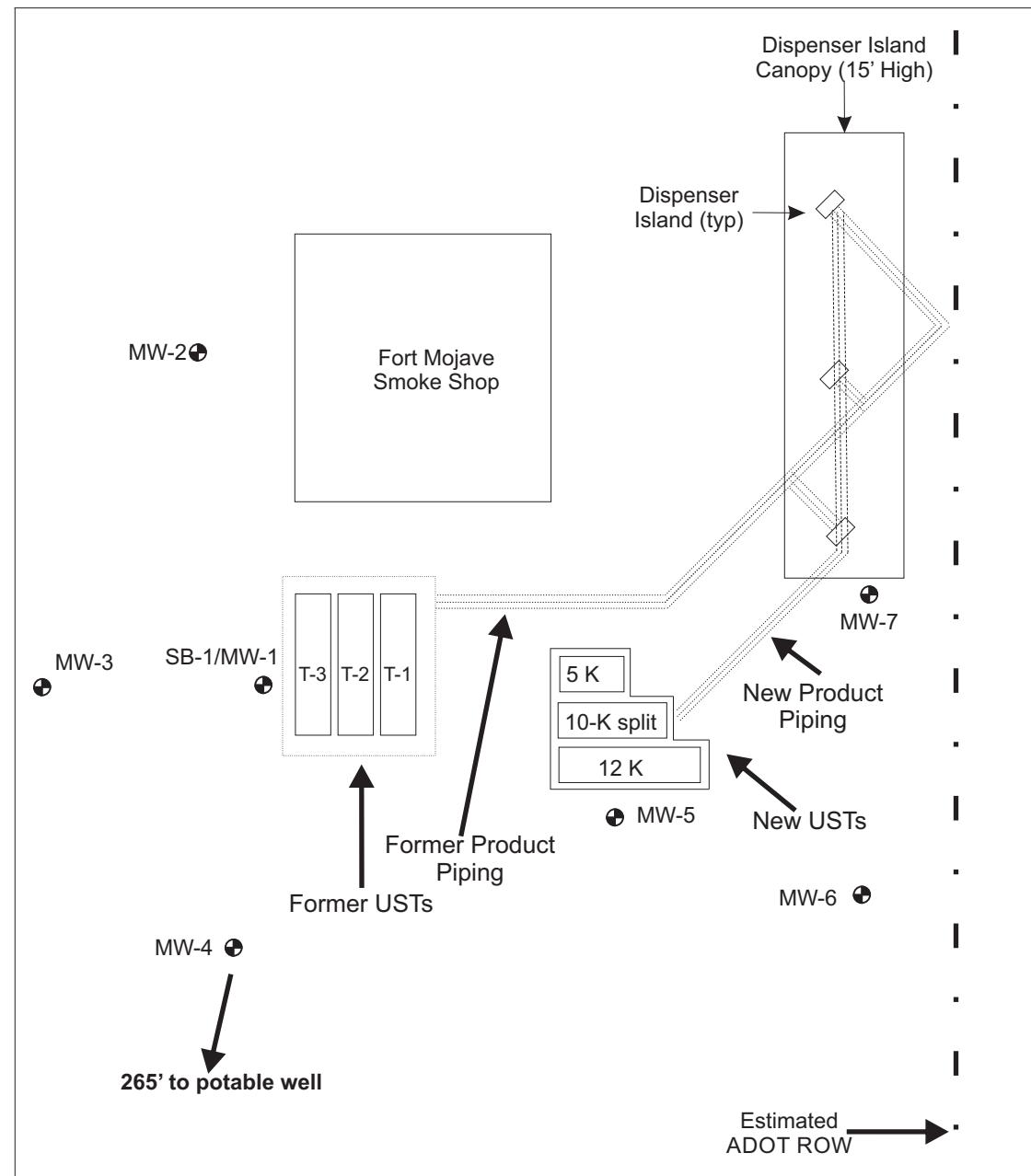
FIGURE
1



Willow Drive



Spirit Mountain
RV Park



LEGEND

● MW-1 Groundwater Monitoring Well and ID Number

Note: All locations and boundaries are approximate.

SITE PLAN

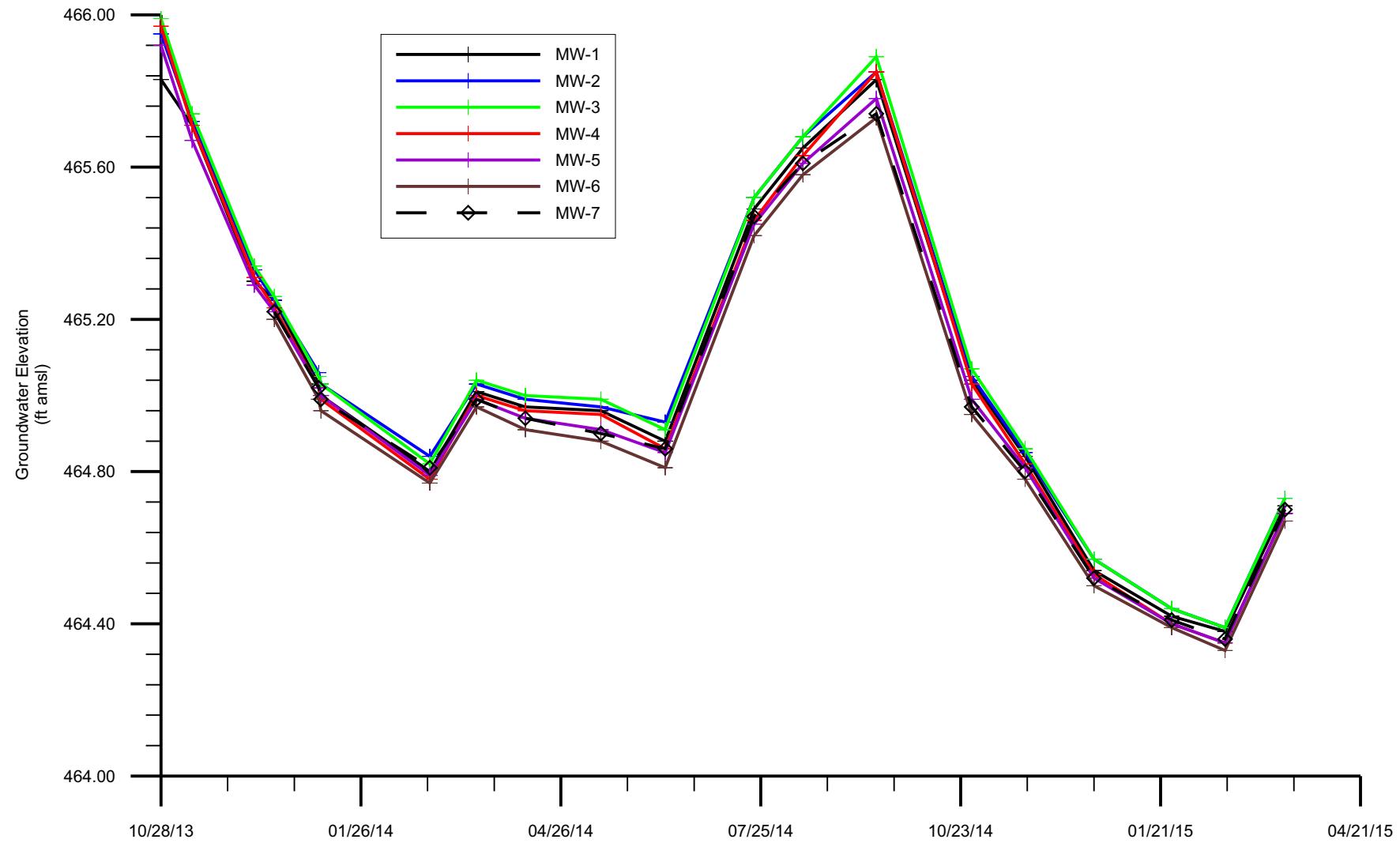
Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

FIGURE
2

EN TECH

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Project # 2789
April 2014

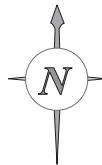


HYDROGRAPH

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

Project # 2789
April 2015

FIGURE
3



Willow Drive

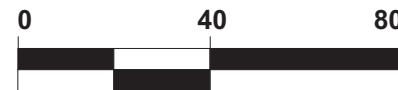
LEGEND

- MW-1 Groundwater Monitoring Well and ID Number
- - - Groundwater Contour Line
- Average Groundwater Flow Direction

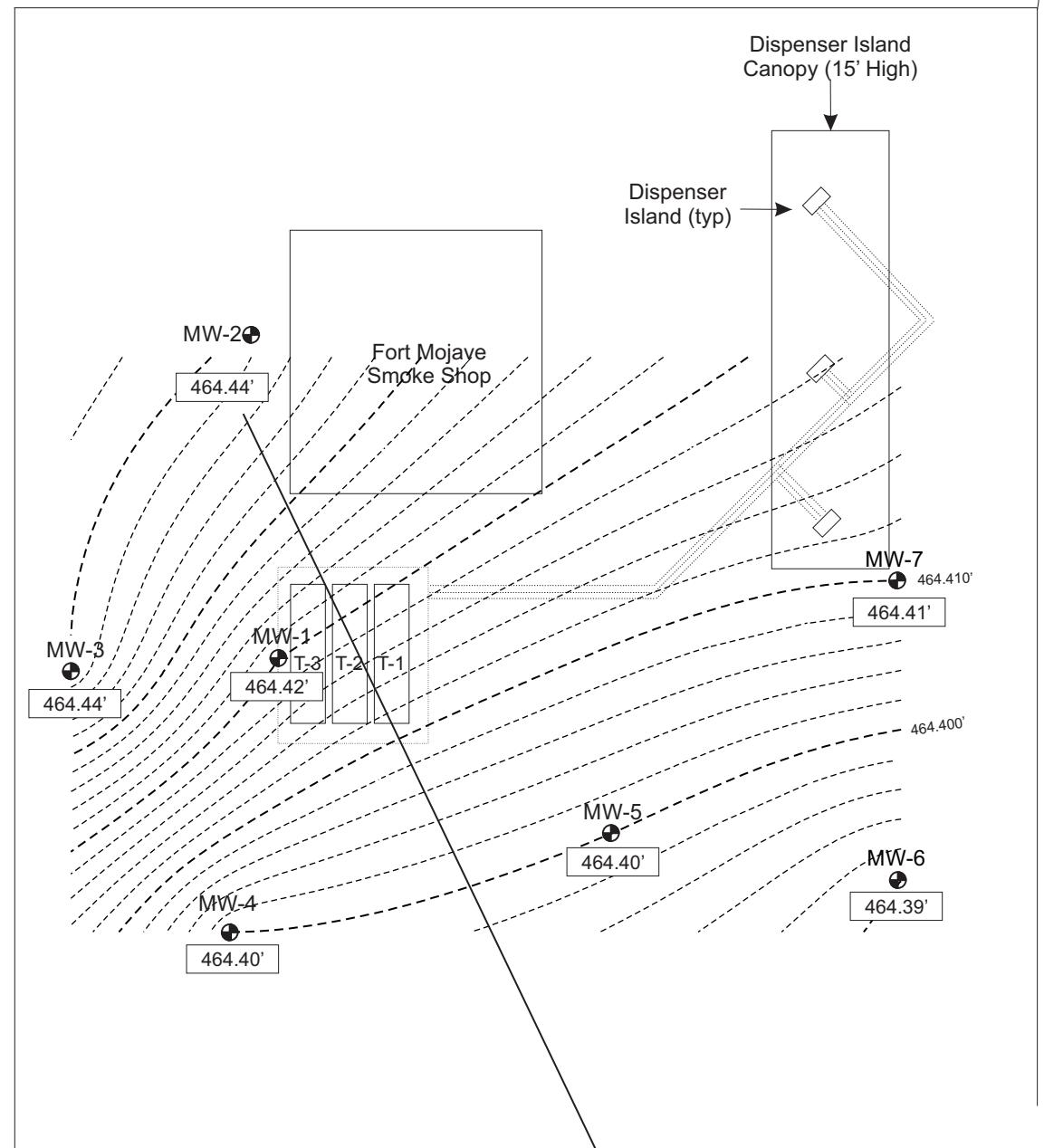
NOTES

Contour interval is 0.002.

Average groundwater gradient is
South 25.6° East @ 0.00032 feet per foot.



Spirit Mountain
RV Park



US HWY 95

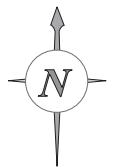
Note: All locations and boundaries are approximate.

FIGURE
4

JANUARY 26, 2015 GROUNDWATER
CONTOUR MAP
Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

Project # 2789
April 2015





Willow Drive

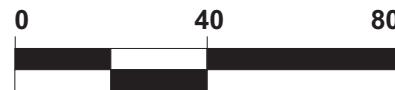
LEGEND

- MW-1 Groundwater Monitoring Well and ID Number
- - - Groundwater Contour Line
- Average Groundwater Flow Direction

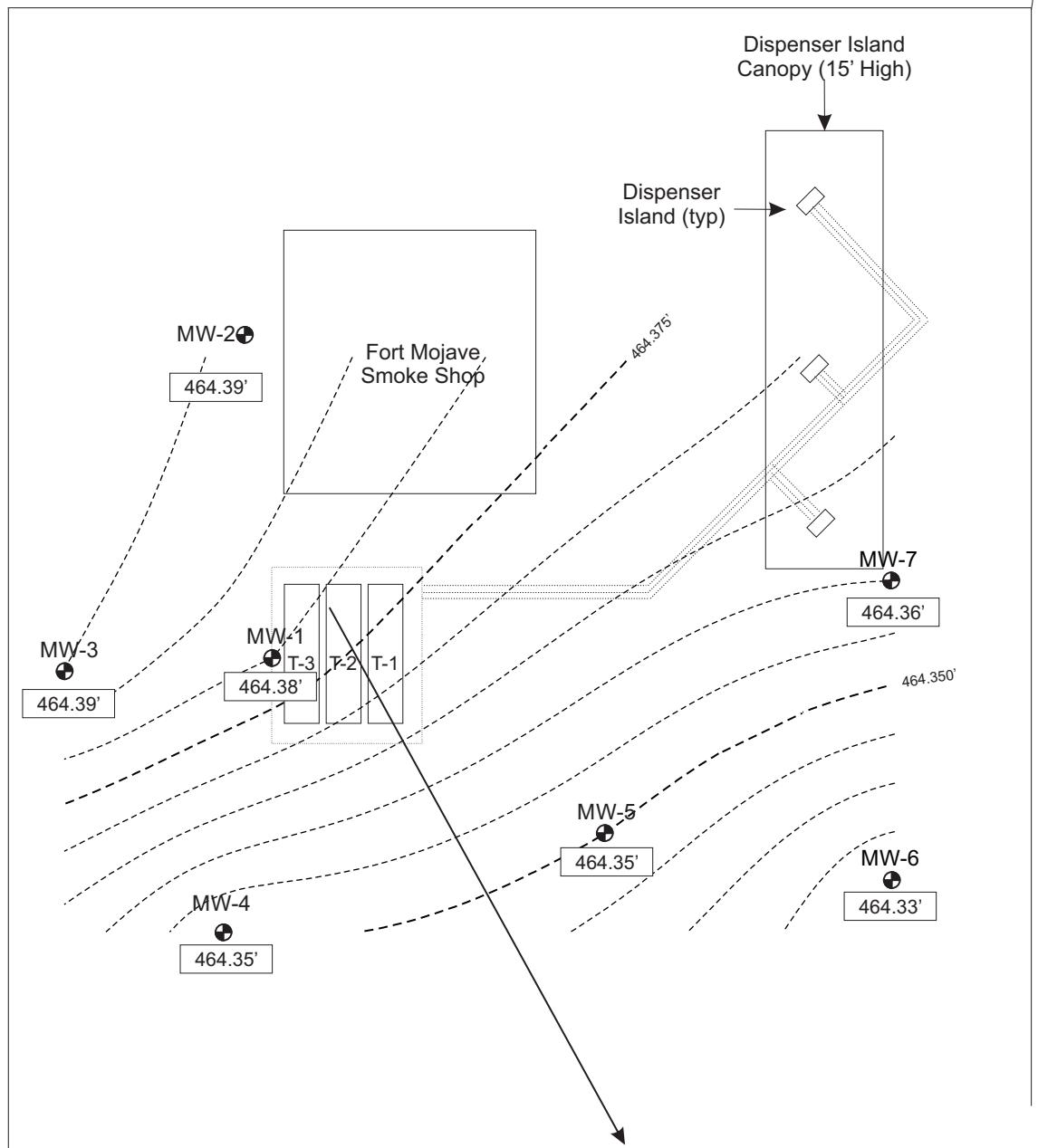
NOTES

Contour interval is 0.005.

Average groundwater gradient is
South 28.8° East @ 0.00036 feet per foot.



Spirit Mountain
RV Park



Note: All locations and boundaries are approximate.

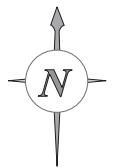
US HWY 95

FIGURE
5

FEBRUARY 19, 2015
GROUNDWATER CONTOUR MAP
Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

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Project # 2789
April 2015



Willow Drive

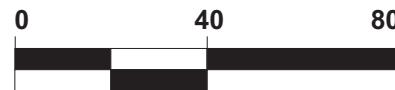
LEGEND

- MW-1 Groundwater Monitoring Well and ID Number
- - - Groundwater Contour Line
- Average Groundwater Flow Direction

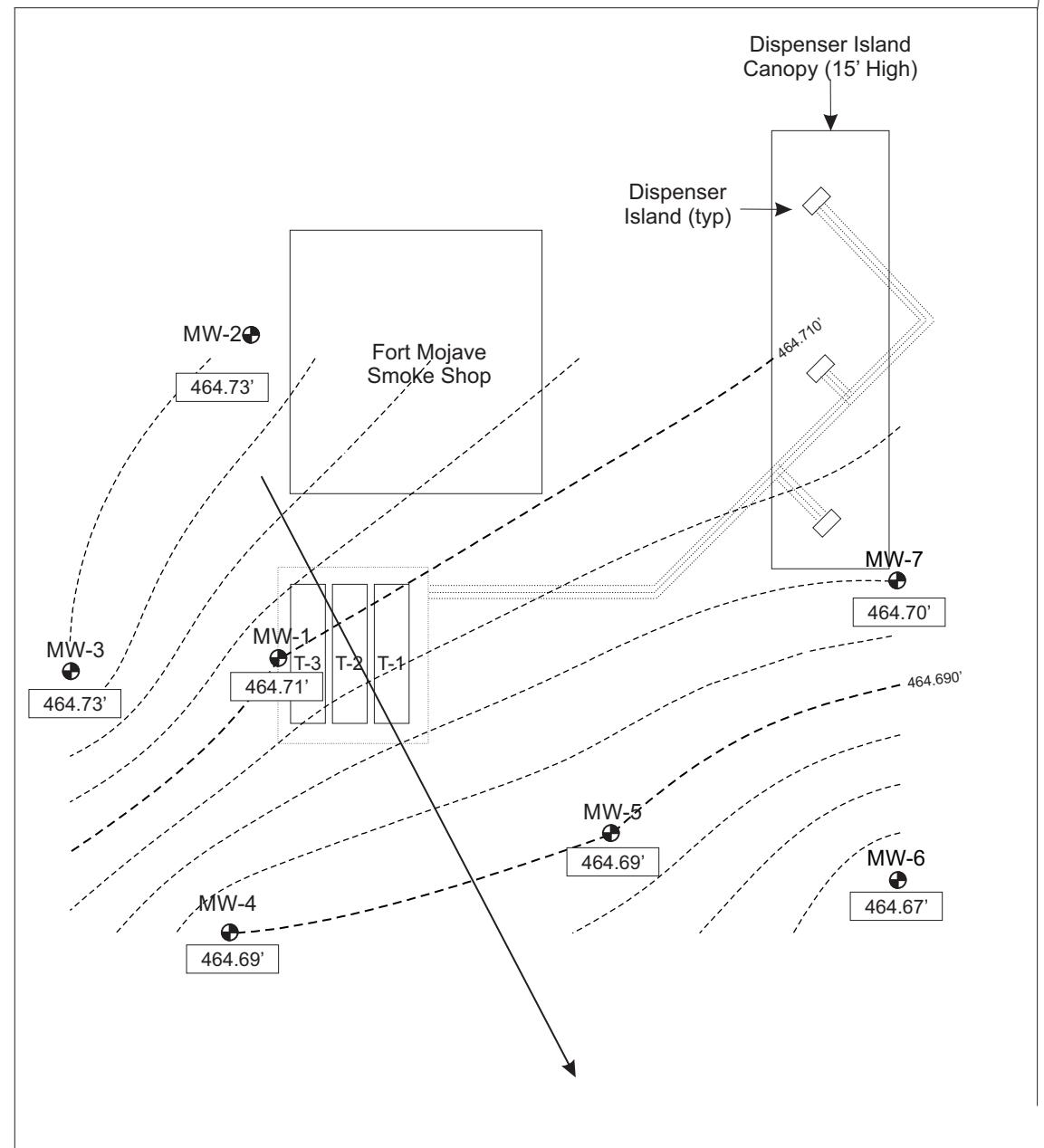
NOTES

Contour interval is 0.005.

Average groundwater gradient is
South 27.6° East @ 0.00035 feet per foot.



Spirit Mountain
RV Park



Note: All locations and boundaries are approximate.

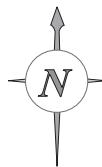
US HWY 95

FIGURE
6

MARCH 18, 2015
GROUNDWATER CONTOUR MAP
Project # 2789
April 2015

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440



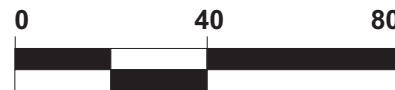


Willow Drive

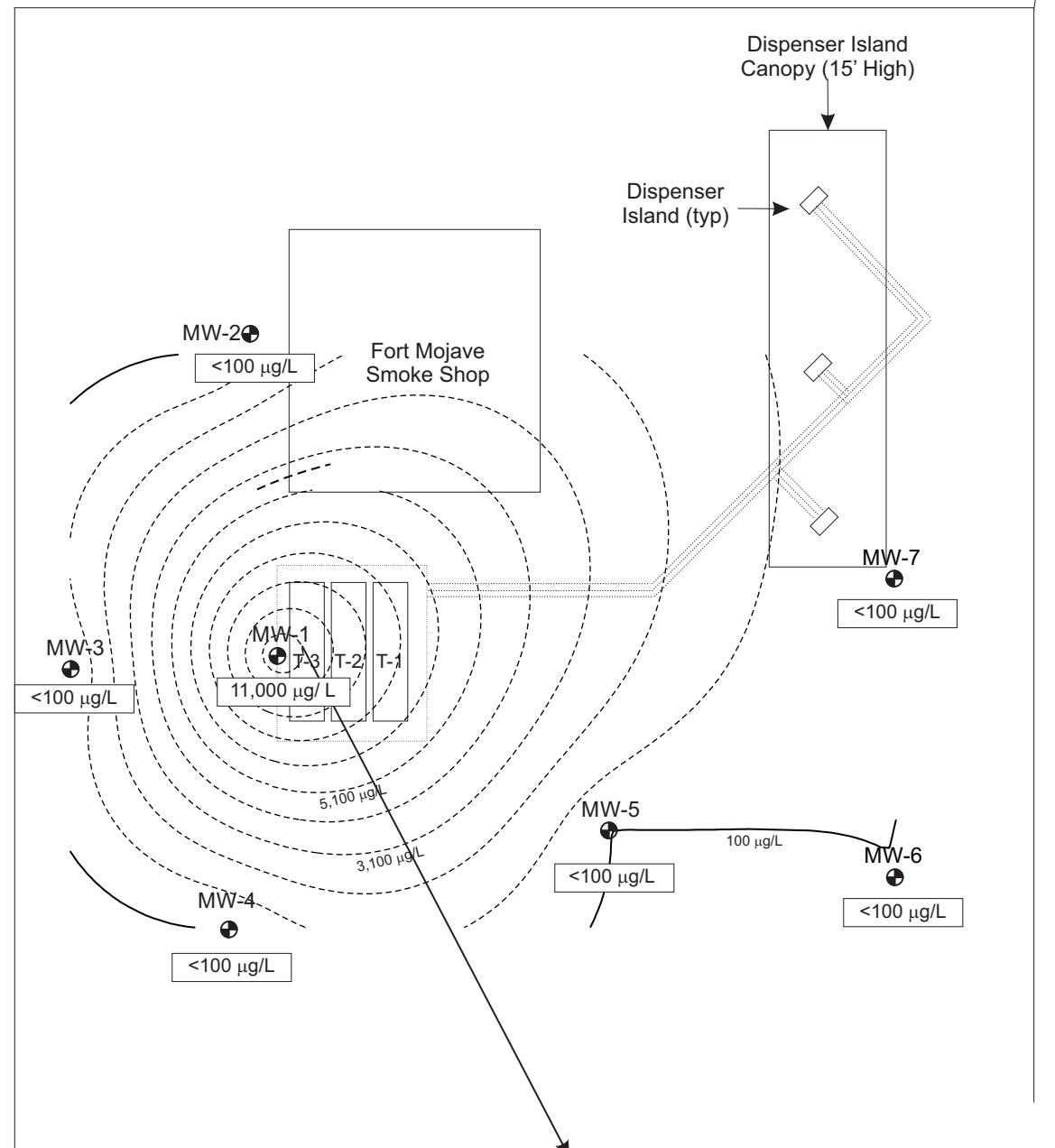
- LEGEND**
- MW-1 Groundwater Monitoring Well and ID Number
 - - - Isoconcentration Line
 - Average Groundwater Flow Direction

NOTES

Contour interval is 1,000 µg/L except where noted.



Spirit Mountain
RV Park



US HWY 95

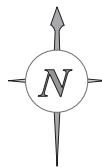
Note: All locations and boundaries are approximate.

FIGURE
7

MARCH 18, 2015
ISOCONCENTRATION MAP
Project # 2789
April 2015

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440





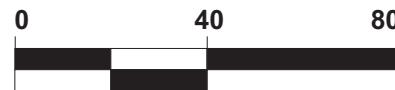
Willow Drive

LEGEND

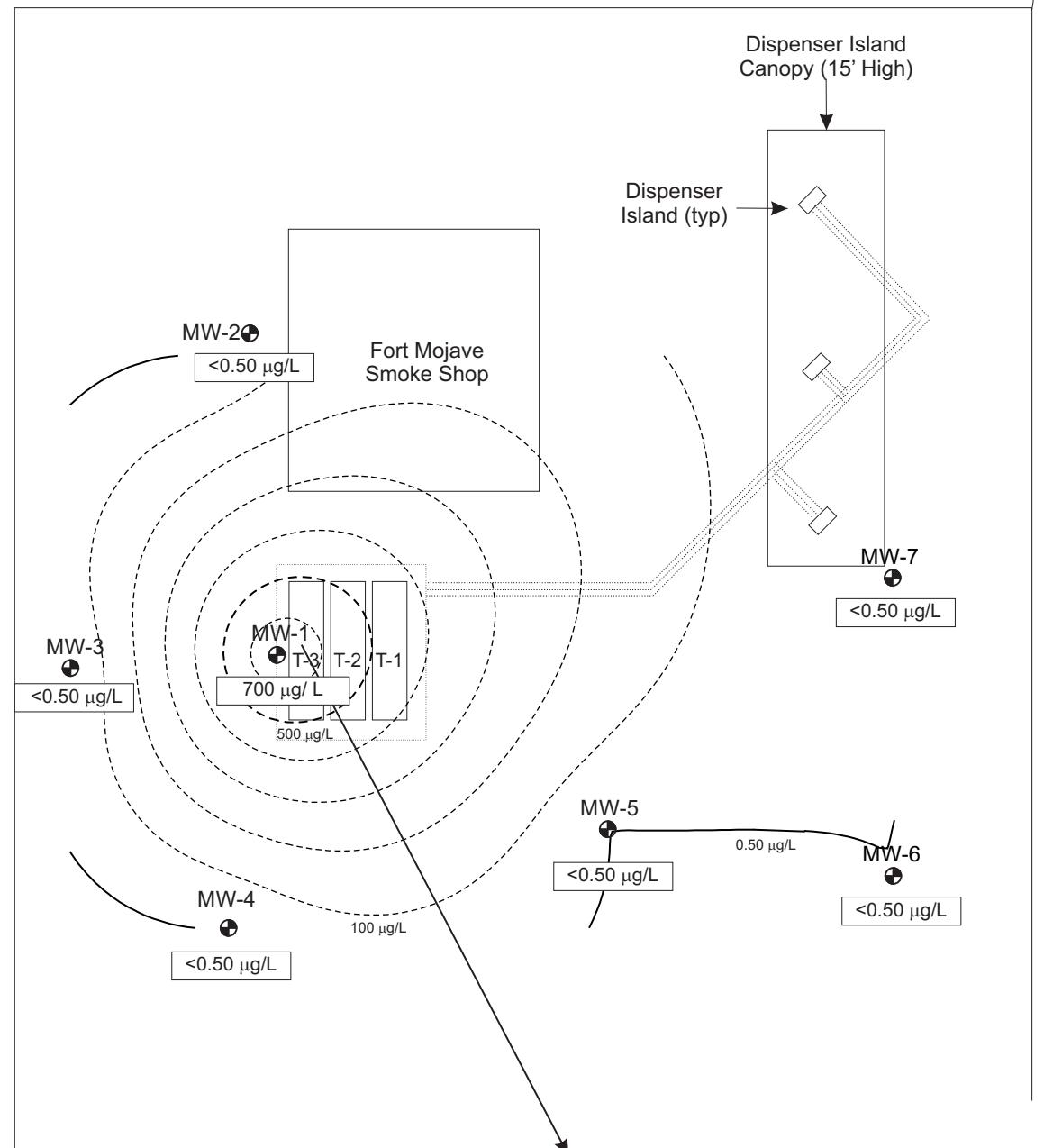
- MW-1 Groundwater Monitoring Well and ID Number
- - - Isoconcentration Line
- Average Groundwater Flow Direction

NOTES

Contour interval is 100 µg/L except where noted.



Spirit Mountain
RV Park



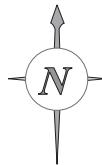
Note: All locations and boundaries are approximate.

FIGURE
8

MARCH 18, 2015 BENZENE
ISOCONCENTRATION MAP
Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440



Project # 2789
April 2015



Willow Drive

LEGEND

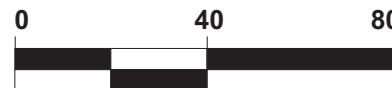
- MW-1 Groundwater Monitoring Well
- Average Groundwater Flow Direction

NOTES

Average direction of groundwater flow is calculated at south 47.7° east.

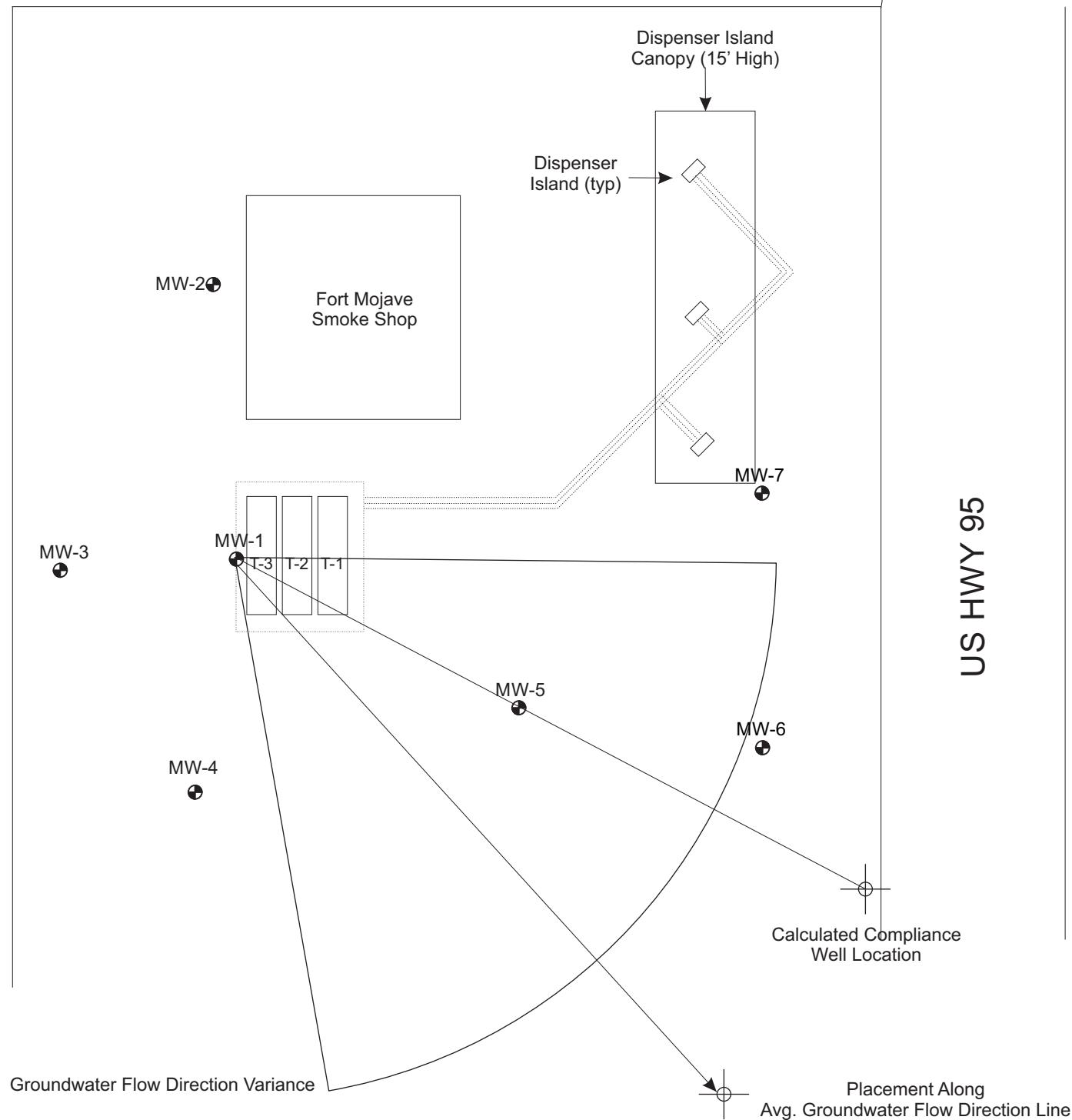
Average groundwater flow direction based on average groundwater flow direction calculated for 17 of 18 groundwater monitoring events since November 11, 2013. The initial groundwater sample event on October 28, 2013 was eliminated from consideration because the flow direction appears to be a distant outlier in the sample set. See Table 1.

Log plot from MW-1 to MW-5 to compliance well based on GRO detection limit of 100 µg/L and December 2014 GRO results. Compliance well located 193 feet from MW-1. Recommend placing actual well along average groundwater flow direction line.



Note: All locations and boundaries are approximate.

Spirit Mountain
RV Park

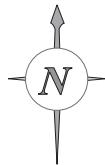


Project #2789
March 2015

LOG PLOT FOR GRO

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

FIGURE
9



LEGEND

- MW-1 Groundwater Monitoring Well
- Average Groundwater Flow Direction

NOTES

Average direction of groundwater flow is calculated at south 47.7° east.

Average groundwater flow direction based on average groundwater flow direction calculated for 17 of 18 groundwater monitoring events since November 11, 2013. The initial groundwater sample event on October 28, 2013 was eliminated from consideration because the flow direction appears to be a distant outlier in the sample set. See Table 1.

Log plot from MW-1 to MW-5 to compliance well based on MCL for benzene of 5 µg/L and December 2014 benzene results. Compliance well located 325 feet from MW-1. Recommend locating actual well along average groundwater flow direction line.



Note: All locations and boundaries are approximate.

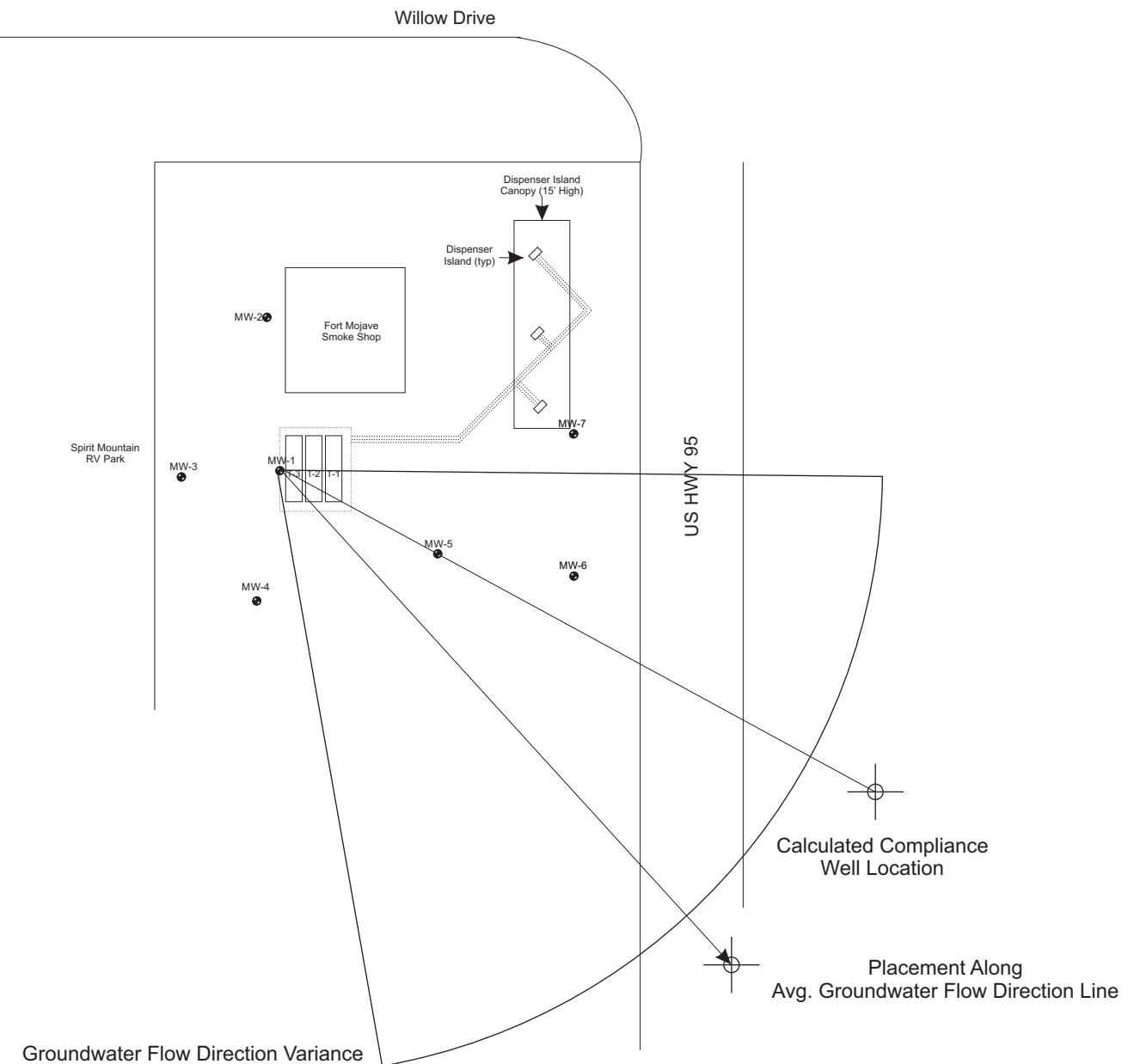
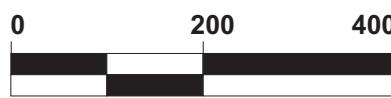
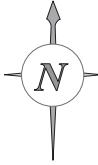


FIGURE
10

Fort Mojave Smoke Shop
8501 South Highway 95
Mohave Valley, Arizona 86440

Project # 2789
March 2015

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Scale: 1 inch = 200 feet

Note: All locations and boundaries are approximate.

Legend

- Shaded Area is 1/4 Mile Radius From Point of Release Within Calculated Groundwater Flow Direction Variations
- Identified Registered Wells Within 1/4 Mile Radius
- Average Calculated Groundwater Flow Direction



ENVIRONMENTAL TECHNOLOGY, INC.

Project # 2789
April 2015

1/4 MILE RECEPTOR MAP

Fort Mojave Smoke Shop
8501 South Highway 95
Fort Mohave, Arizona 86440

FIGURE
11

APPENDIX A. Laboratory Reports & Chain-of-Custody Documentation



Orange Coast Analytical, Inc.

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

4620 East Elwood Street, Suite 4 Phoenix, AZ 85040

(480) 736-0960

Laboratory Certification (ADHS) No.: AZ0558, AZ0646
Expiration Date: 2015

Laboratory Director's Name:
Mark Noorani

Client: EnTech

Laboratory Reference: ENT AZ9379

Project Name: Fort Mojave Smoke Shop

Project Number: 2789

Date Received: 3/19/2015

Date Reported: 3/27/2015

Chain of Custody Received:

Analytical Method: 8015D, 8260B,



Mark Noorani, Laboratory Director

Mr. John Kennedy
EnTech
2541 E. University Dr
Phoenix, AZ, 85034

Lab Reference #: ENT AZ9379
Project Name: Fort Mojave Smoke Shop
Project #: 2789

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 4°C, on ice.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. John Kennedy
EnTech
2541 E. University Dr
Phoenix, AZ, 85034

Lab Reference #: ENT AZ9379
Project Name: Fort Mojave Smoke Shop
Project #: 2789

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
MW-2	AZ9379-001	3/19/2015	3/18/2015	Water
MW-3	AZ9379-002	3/19/2015	3/18/2015	Water
MW-4	AZ9379-003	3/19/2015	3/18/2015	Water
MW-6	AZ9379-004	3/19/2015	3/18/2015	Water
MW-7	AZ9379-005	3/19/2015	3/18/2015	Water
MW-5	AZ9379-006	3/19/2015	3/18/2015	Water
MW-1	AZ9379-007	3/19/2015	3/18/2015	Water
Trip Blank	AZ9379-008	3/19/2015		Water

Mr. John Kennedy
EnTech
2541 E. University Dr
Phoenix, AZ, 85034

Lab Reference #: ENT AZ9379
Project Name: Fort Mojave Smoke Shop
Project #: 2789

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix		
MW-2	AZ9379-001	3/19/2015	3/18/2015	3/24/2015	3/24/2015	Water		
ANALYTE								
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE					
Bromobenzene	108-86-1	<1.0	Methyl t-butyl ether (MTBE)	1634-04-4	<1.0			
Bromoform	74-97-5	<1.0	Naphthalene	91-20-3	<3.0			
Bromochloromethane	75-27-4	<1.0	n-Propylbenzene	103-65-1	<1.0			
Bromodichloromethane	75-25-2	<1.0	Styrene	100-42-5	<1.0			
Bromomethane	74-83-9	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0			
n-Butylbenzene	104-51-8	<1.0	Tetrachloroethene	127-18-4	<1.0			
sec-Butylbenzene	135-98-8	<1.0	Toluene	108-88-3	<1.0			
tert-Butylbenzene	98-06-6	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0			
Carbon tetrachloride	56-23-5	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0			
Chlorobenzene	108-90-7	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0			
Chloroethane	75-00-3	<5.0	Trichloroethene	79-01-6	<1.0			
Chloroform	67-66-3	<1.0	Trichlorofluoromethane	75-69-4	<2.0			
Chloromethane	74-87-3	<5.0	1,2,3-Trichloropropane	96-18-4	<1.0			
2-Chlorotoluene	95-49-8	<1.0	1,2,4-Trimethylbenzene	95-63-6	<1.0			
4-Chlorotoluene	106-43-4	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0			
Dibromochloromethane	124-48-1	<1.0	Vinyl Chloride	75-01-4	<2.0			
1,2-Dibromoethane	106-93-4	<1.0	Total Xylenes	1330-20-7	<2.0			
1,2-Dichlorobenzene	95-50-1	<1.0						
1,3-Dichlorobenzene	541-73-1	<1.0						
1,4-Dichlorobenzene	106-46-7	<1.0						
1,1-Dichloroethane	75-34-3	<1.0						
Dichlorodifluoromethane	75-71-8	<2.0						
1,2-Dichloroethane	107-06-2	<1.0						
1,1-Dichloroethene	75-35-4	<0.50						
cis-1,2-Dichloroethene	156-59-2	<0.50						
trans-1,2-Dichloroethene	156-60-5	<0.50						
1,2-Dichloropropane	78-87-5	<1.0						
1,3-Dichloropropane	142-28-9	<1.0						
2,2-Dichloropropane	594-20-7	<1.0						
1,1-Dichloropropene	563-58-6	<1.0						
cis-1,3-Dichloropropene	10061-01-5	<1.0						
trans-1,3-Dichloropropene	10061-02-6	<1.0						
Ethylbenzene	100-41-4	<1.0						
Isopropylbenzene	98-82-8	<1.0						
4-Isopropyltoluene	99-87-6	<1.0						
<u>Surrogate:</u>	% RC	Acceptable % RC	<u>Dilution Factor: 1</u>					
Dibromofluoromethane:	90	64-145 %	<u>Data Qualifiers: None</u>					
Toluene-d8:	69	59-130 %						
4-Bromofluorobenzene:	66	51-130 %						

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Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
MW-3	AZ9379-002	3/19/2015	3/18/2015	3/24/2015	3/24/2015	Water
ANALYTE						
Benzene	71-43-2	<0.50				
Bromobenzene	108-86-1	<1.0				
Bromoform	74-97-5	<1.0				
Bromochloromethane	75-27-4	<1.0				
Bromodichloromethane	75-25-2	<1.0				
Bromomethane	74-83-9	<5.0				
n-Butylbenzene	104-51-8	<1.0				
sec-Butylbenzene	135-98-8	<1.0				
tert-Butylbenzene	98-06-6	<1.0				
Carbon tetrachloride	56-23-5	<1.0				
Chlorobenzene	108-90-7	<1.0				
Chloroethane	75-00-3	<5.0				
Chloroform	67-66-3	<1.0				
Chloromethane	74-87-3	<5.0				
2-Chlorotoluene	95-49-8	<1.0				
4-Chlorotoluene	106-43-4	<1.0				
Dibromochloromethane	124-48-1	<1.0				
1,2-Dibromoethane	106-93-4	<1.0				
1,2-Dichlorobenzene	95-50-1	<1.0				
1,3-Dichlorobenzene	541-73-1	<1.0				
1,4-Dichlorobenzene	106-46-7	<1.0				
1,1-Dichloroethane	75-34-3	<1.0				
Dichlorodifluoromethane	75-71-8	<2.0				
1,2-Dichloroethane	107-06-2	<1.0				
1,1-Dichloroethene	75-35-4	<0.50				
cis-1,2-Dichloroethene	156-59-2	<0.50				
trans-1,2-Dichloroethene	156-60-5	<0.50				
1,2-Dichloropropane	78-87-5	<1.0				
1,3-Dichloropropane	142-28-9	<1.0				
2,2-Dichloropropane	594-20-7	<1.0				
1,1-Dichloropropene	563-58-6	<1.0				
cis-1,3-Dichloropropene	10061-01-5	<1.0				
trans-1,3-Dichloropropene	10061-02-6	<1.0				
Ethylbenzene	100-41-4	<1.0				
Isopropylbenzene	98-82-8	<1.0				
4-Isopropyltoluene	99-87-6	<1.0				
<u>Surrogate:</u>	% RC	Acceptable % RC		Dilution Factor:	1	
Dibromofluoromethane:	91	64-145 %		Data Qualifiers:	None	
Toluene-d8:	70	59-130 %				
4-Bromofluorobenzene:	67	51-130 %				

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Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix		
MW-4	AZ9379-003	3/19/2015	3/18/2015	3/24/2015	3/24/2015	Water		
ANALYTE								
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE					
Bromobenzene	108-86-1	<1.0	Methyl t-butyl ether (MTBE)	1634-04-4	<1.0			
Bromoform	74-97-5	<1.0	Naphthalene	91-20-3	<3.0			
Bromochloromethane	75-27-4	<1.0	n-Propylbenzene	103-65-1	<1.0			
Bromodichloromethane	75-25-2	<1.0	Styrene	100-42-5	<1.0			
Bromomethane	74-83-9	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0			
n-Butylbenzene	104-51-8	<1.0	Tetrachloroethene	127-18-4	<1.0			
sec-Butylbenzene	135-98-8	<1.0	Toluene	108-88-3	<1.0			
tert-Butylbenzene	98-06-6	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0			
Carbon tetrachloride	56-23-5	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0			
Chlorobenzene	108-90-7	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0			
Chloroethane	75-00-3	<5.0	Trichloroethene	79-01-6	<1.0			
Chloroform	67-66-3	<1.0	Trichlorofluoromethane	75-69-4	<2.0			
Chloromethane	74-87-3	<5.0	1,2,3-Trichloropropane	96-18-4	<1.0			
2-Chlorotoluene	95-49-8	<1.0	1,2,4-Trimethylbenzene	95-63-6	<1.0			
4-Chlorotoluene	106-43-4	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0			
Dibromochloromethane	124-48-1	<1.0	Vinyl Chloride	75-01-4	<2.0			
1,2-Dibromoethane	106-93-4	<1.0	Total Xylenes	1330-20-7	<2.0			
1,2-Dichlorobenzene	95-50-1	<1.0						
1,3-Dichlorobenzene	541-73-1	<1.0						
1,4-Dichlorobenzene	106-46-7	<1.0						
1,1-Dichloroethane	75-34-3	<1.0						
Dichlorodifluoromethane	75-71-8	<2.0						
1,2-Dichloroethane	107-06-2	<1.0						
1,1-Dichloroethene	75-35-4	<0.50						
cis-1,2-Dichloroethene	156-59-2	<0.50						
trans-1,2-Dichloroethene	156-60-5	<0.50						
1,2-Dichloropropane	78-87-5	<1.0						
1,3-Dichloropropane	142-28-9	<1.0						
2,2-Dichloropropane	594-20-7	<1.0						
1,1-Dichloropropene	563-58-6	<1.0						
cis-1,3-Dichloropropene	10061-01-5	<1.0						
trans-1,3-Dichloropropene	10061-02-6	<1.0						
Ethylbenzene	100-41-4	<1.0						
Isopropylbenzene	98-82-8	<1.0						
4-Isopropyltoluene	99-87-6	<1.0						
Surrogate:	% RC	Acceptable % RC	Dilution Factor: 1					
Dibromofluoromethane:	91	64-145 %	Data Qualifiers: None					
Toluene-d8:	69	59-130 %						
4-Bromofluorobenzene:	65	51-130 %						

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Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix		
MW-6	AZ9379-004	3/19/2015	3/18/2015	3/24/2015	3/24/2015	Water		
ANALYTE								
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE					
Bromobenzene	108-86-1	<1.0	Methyl t-butyl ether (MTBE)	1634-04-4	<1.0			
Bromoform	74-97-5	<1.0	Naphthalene	91-20-3	<3.0			
Bromochloromethane	75-27-4	<1.0	n-Propylbenzene	103-65-1	<1.0			
Bromodichloromethane	75-25-2	<1.0	Styrene	100-42-5	<1.0			
Bromomethane	74-83-9	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0			
n-Butylbenzene	104-51-8	<1.0	Tetrachloroethene	127-18-4	<1.0			
sec-Butylbenzene	135-98-8	<1.0	Toluene	108-88-3	<1.0			
tert-Butylbenzene	98-06-6	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0			
Carbon tetrachloride	56-23-5	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0			
Chlorobenzene	108-90-7	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0			
Chloroethane	75-00-3	<5.0	Trichloroethene	79-01-6	<1.0			
Chloroform	67-66-3	<1.0	Trichlorofluoromethane	75-69-4	<2.0			
Chloromethane	74-87-3	<5.0	1,2,3-Trichloropropane	96-18-4	<1.0			
2-Chlorotoluene	95-49-8	<1.0	1,2,4-Trimethylbenzene	95-63-6	<1.0			
4-Chlorotoluene	106-43-4	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0			
Dibromochloromethane	124-48-1	<1.0	Vinyl Chloride	75-01-4	<2.0			
1,2-Dibromoethane	106-93-4	<1.0	Total Xylenes	1330-20-7	<2.0			
1,2-Dichlorobenzene	95-50-1	<1.0						
1,3-Dichlorobenzene	541-73-1	<1.0						
1,4-Dichlorobenzene	106-46-7	<1.0						
1,1-Dichloroethane	75-34-3	<1.0						
Dichlorodifluoromethane	75-71-8	<2.0						
1,2-Dichloroethane	107-06-2	<1.0						
1,1-Dichloroethene	75-35-4	<0.50						
cis-1,2-Dichloroethene	156-59-2	<0.50						
trans-1,2-Dichloroethene	156-60-5	<0.50						
1,2-Dichloropropane	78-87-5	<1.0						
1,3-Dichloropropane	142-28-9	<1.0						
2,2-Dichloropropane	594-20-7	<1.0						
1,1-Dichloropropene	563-58-6	<1.0						
cis-1,3-Dichloropropene	10061-01-5	<1.0						
trans-1,3-Dichloropropene	10061-02-6	<1.0						
Ethylbenzene	100-41-4	<1.0						
Isopropylbenzene	98-82-8	<1.0						
4-Isopropyltoluene	99-87-6	<1.0						
<u>Surrogate:</u>	% RC	Acceptable % RC	<u>Dilution Factor: 1</u>					
Dibromofluoromethane:	92	64-145 %	<u>Data Qualifiers: None</u>					
Toluene-d8:	70	59-130 %						
4-Bromofluorobenzene:	67	51-130 %						

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Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix		
MW-7	AZ9379-005	3/19/2015	3/18/2015	3/25/2015	3/25/2015	Water		
ANALYTE								
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE					
Bromobenzene	108-86-1	<1.0	Methyl t-butyl ether (MTBE)	1634-04-4	<1.0			
Bromoform	74-97-5	<1.0	Naphthalene	91-20-3	<3.0			
Bromochloromethane	75-27-4	<1.0	n-Propylbenzene	103-65-1	<1.0			
Bromodichloromethane	75-25-2	<1.0	Styrene	100-42-5	<1.0			
Bromomethane	74-83-9	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0			
n-Butylbenzene	104-51-8	<1.0	Tetrachloroethene	127-18-4	<1.0			
sec-Butylbenzene	135-98-8	<1.0	Toluene	108-88-3	<1.0			
tert-Butylbenzene	98-06-6	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0			
Carbon tetrachloride	56-23-5	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0			
Chlorobenzene	108-90-7	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0			
Chloroethane	75-00-3	<5.0	Trichloroethene	79-01-6	<1.0			
Chloroform	67-66-3	<1.0	Trichlorofluoromethane	75-69-4	<2.0			
Chloromethane	74-87-3	<5.0	1,2,3-Trichloropropane	96-18-4	<1.0			
2-Chlorotoluene	95-49-8	<1.0	1,2,4-Trimethylbenzene	95-63-6	<1.0			
4-Chlorotoluene	106-43-4	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0			
Dibromochloromethane	124-48-1	<1.0	Vinyl Chloride	75-01-4	<2.0			
1,2-Dibromoethane	106-93-4	<1.0	Total Xylenes	1330-20-7	<2.0			
1,2-Dichlorobenzene	95-50-1	<1.0						
1,3-Dichlorobenzene	541-73-1	<1.0						
1,4-Dichlorobenzene	106-46-7	<1.0						
1,1-Dichloroethane	75-34-3	<1.0						
Dichlorodifluoromethane	75-71-8	<2.0						
1,2-Dichloroethane	107-06-2	<1.0						
1,1-Dichloroethene	75-35-4	<0.50						
cis-1,2-Dichloroethene	156-59-2	<0.50						
trans-1,2-Dichloroethene	156-60-5	<0.50						
1,2-Dichloropropane	78-87-5	<1.0						
1,3-Dichloropropane	142-28-9	<1.0						
2,2-Dichloropropane	594-20-7	<1.0						
1,1-Dichloropropene	563-58-6	<1.0						
cis-1,3-Dichloropropene	10061-01-5	<1.0						
trans-1,3-Dichloropropene	10061-02-6	<1.0						
Ethylbenzene	100-41-4	<1.0						
Isopropylbenzene	98-82-8	<1.0						
4-Isopropyltoluene	99-87-6	<1.0						
<u>Surrogate:</u>	% RC	Acceptable % RC	<u>Dilution Factor: 1</u>					
Dibromofluoromethane:	106	64-145 %	<u>Data Qualifiers: None</u>					
Toluene-d8:	80	59-130 %						
4-Bromofluorobenzene:	76	51-130 %						

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Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix		
MW-5	AZ9379-006	3/19/2015	3/18/2015	3/25/2015	3/25/2015	Water		
ANALYTE								
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE					
Bromobenzene	108-86-1	<1.0	Methyl t-butyl ether (MTBE)	1634-04-4	<1.0			
Bromoform	74-97-5	<1.0	Naphthalene	91-20-3	<3.0			
Bromochloromethane	75-27-4	<1.0	n-Propylbenzene	103-65-1	<1.0			
Bromodichloromethane	75-25-2	<1.0	Styrene	100-42-5	<1.0			
Bromomethane	74-83-9	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0			
n-Butylbenzene	104-51-8	<1.0	Tetrachloroethene	127-18-4	<1.0			
sec-Butylbenzene	135-98-8	<1.0	Toluene	108-88-3	<1.0			
tert-Butylbenzene	98-06-6	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0			
Carbon tetrachloride	56-23-5	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0			
Chlorobenzene	108-90-7	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0			
Chloroethane	75-00-3	<5.0	Trichloroethene	79-01-6	<1.0			
Chloroform	67-66-3	<1.0	Trichlorofluoromethane	75-69-4	<2.0			
Chloromethane	74-87-3	<5.0	1,2,3-Trichloropropane	96-18-4	<1.0			
2-Chlorotoluene	95-49-8	<1.0	1,2,4-Trimethylbenzene	95-63-6	<1.0			
4-Chlorotoluene	106-43-4	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0			
Dibromochloromethane	124-48-1	<1.0	Vinyl Chloride	75-01-4	<2.0			
1,2-Dibromoethane	106-93-4	<1.0	Total Xylenes	1330-20-7	<2.0			
1,2-Dichlorobenzene	95-50-1	<1.0						
1,3-Dichlorobenzene	541-73-1	<1.0						
1,4-Dichlorobenzene	106-46-7	<1.0						
1,1-Dichloroethane	75-34-3	<1.0						
Dichlorodifluoromethane	75-71-8	<2.0						
1,2-Dichloroethane	107-06-2	<1.0						
1,1-Dichloroethene	75-35-4	<0.50						
cis-1,2-Dichloroethene	156-59-2	<0.50						
trans-1,2-Dichloroethene	156-60-5	<0.50						
1,2-Dichloropropane	78-87-5	<1.0						
1,3-Dichloropropane	142-28-9	<1.0						
2,2-Dichloropropane	594-20-7	<1.0						
1,1-Dichloropropene	563-58-6	<1.0						
cis-1,3-Dichloropropene	10061-01-5	<1.0						
trans-1,3-Dichloropropene	10061-02-6	<1.0						
Ethylbenzene	100-41-4	<1.0						
Isopropylbenzene	98-82-8	<1.0						
4-Isopropyltoluene	99-87-6	<1.0						
<u>Surrogate:</u>	% RC	Acceptable % RC	<u>Dilution Factor: 1</u>					
Dibromofluoromethane:	103	64-145 %	<u>Data Qualifiers: None</u>					
Toluene-d8:	79	59-130 %						
4-Bromofluorobenzene:	77	51-130 %						

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Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
MW-1	AZ9379-007	3/19/2015	3/18/2015	3/25/2015	3/25/2015	Water
<u>ANALYTE</u>						
Benzene	71-43-2	700				
Bromobenzene	108-86-1	<100				
Bromoform	74-97-5	<100				
Bromochloromethane	75-27-4	<100				
Bromodichloromethane	75-25-2	<100				
Bromomethane	74-83-9	<500				
n-Butylbenzene	104-51-8	<100				
sec-Butylbenzene	135-98-8	<100				
tert-Butylbenzene	98-06-6	<100				
Carbon tetrachloride	56-23-5	<100				
Chlorobenzene	108-90-7	<100				
Chloroethane	75-00-3	<500				
Chloroform	67-66-3	<100				
Chloromethane	74-87-3	<500				
2-Chlorotoluene	95-49-8	<100				
4-Chlorotoluene	106-43-4	<100				
Dibromochloromethane	124-48-1	<100				
1,2-Dibromoethane	106-93-4	<100				
1,2-Dichlorobenzene	95-50-1	<100				
1,3-Dichlorobenzene	541-73-1	<100				
1,4-Dichlorobenzene	106-46-7	<100				
1,1-Dichloroethane	75-34-3	<100				
Dichlorodifluoromethane	75-71-8	<200				
1,2-Dichloroethane	107-06-2	<100				
1,1-Dichloroethene	75-35-4	<50				
cis-1,2-Dichloroethene	156-59-2	<50				
trans-1,2-Dichloroethene	156-60-5	<50				
1,2-Dichloropropane	78-87-5	<100				
1,3-Dichloropropane	142-28-9	<100				
2,2-Dichloropropane	594-20-7	<100				
1,1-Dichloropropene	563-58-6	<100				
cis-1,3-Dichloropropene	10061-01-5	<100				
trans-1,3-Dichloropropene	10061-02-6	<100				
Ethylbenzene	100-41-4	330				
Isopropylbenzene	98-82-8	<100				
4-Isopropyltoluene	99-87-6	<100				
<u>Surrogate:</u>	% RC	Acceptable % RC		Dilution Factor:	100	
Dibromofluoromethane:	105	64-145 %		Data Qualifiers:	D2,	
Toluene-d8:	78	59-130 %				
4-Bromofluorobenzene:	81	51-130 %				

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Project #: 2789

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Trip Blank	AZ9379-008	3/19/2015		3/25/2015	3/25/2015	Water
ANALYTE						
Benzene	71-43-2	<0.50				
Bromobenzene	108-86-1	<1.0				
Bromoform	74-97-5	<1.0				
Bromochloromethane	75-27-4	<1.0				
Bromodichloromethane	75-25-2	<1.0				
Bromomethane	74-83-9	<5.0				
n-Butylbenzene	104-51-8	<1.0				
sec-Butylbenzene	135-98-8	<1.0				
tert-Butylbenzene	98-06-6	<1.0				
Carbon tetrachloride	56-23-5	<1.0				
Chlorobenzene	108-90-7	<1.0				
Chloroethane	75-00-3	<5.0				
Chloroform	67-66-3	<1.0				
Chloromethane	74-87-3	<5.0				
2-Chlorotoluene	95-49-8	<1.0				
4-Chlorotoluene	106-43-4	<1.0				
Dibromochloromethane	124-48-1	<1.0				
1,2-Dibromoethane	106-93-4	<1.0				
1,2-Dichlorobenzene	95-50-1	<1.0				
1,3-Dichlorobenzene	541-73-1	<1.0				
1,4-Dichlorobenzene	106-46-7	<1.0				
1,1-Dichloroethane	75-34-3	<1.0				
Dichlorodifluoromethane	75-71-8	<2.0				
1,2-Dichloroethane	107-06-2	<1.0				
1,1-Dichloroethene	75-35-4	<0.50				
cis-1,2-Dichloroethene	156-59-2	<0.50				
trans-1,2-Dichloroethene	156-60-5	<0.50				
1,2-Dichloropropane	78-87-5	<1.0				
1,3-Dichloropropane	142-28-9	<1.0				
2,2-Dichloropropane	594-20-7	<1.0				
1,1-Dichloropropene	563-58-6	<1.0				
cis-1,3-Dichloropropene	10061-01-5	<1.0				
trans-1,3-Dichloropropene	10061-02-6	<1.0				
Ethylbenzene	100-41-4	<1.0				
Isopropylbenzene	98-82-8	<1.0				
4-Isopropyltoluene	99-87-6	<1.0				
Surrogate:	% RC	Acceptable % RC		Dilution Factor:	1	
Dibromofluoromethane:	104	64-145 %		Data Qualifiers:	None	
Toluene-d8:	80	59-130 %				
4-Bromofluorobenzene:	74	51-130 %				

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Lab Reference #: ENT AZ9379
Project Name: Fort Mojave Smoke Shop
Project #: 2789

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0324151			3/24/2015	3/24/2015	Water
ANALYTE						
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE Methyl t-butyl ether (MTBE)	CAS # 1634-04-4	µg/L <1.0	
Bromobenzene	108-86-1	<1.0	Naphthalene	91-20-3	<3.0	
Bromoform	74-97-5	<1.0	n-Propylbenzene	103-65-1	<1.0	
Bromochloromethane	75-27-4	<1.0	Styrene	100-42-5	<1.0	
Bromodichloromethane	75-25-2	<1.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0	
Bromomethane	74-83-9	<5.0	Tetrachloroethene	127-18-4	<1.0	
n-Butylbenzene	104-51-8	<1.0	Toluene	108-88-3	<1.0	
sec-Butylbenzene	135-98-8	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0	
tert-Butylbenzene	98-06-6	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0	
Carbon tetrachloride	56-23-5	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0	
Chlorobenzene	108-90-7	<1.0	Trichloroethene	79-01-6	<1.0	
Chloroethane	75-00-3	<5.0	Trichlorofluoromethane	75-69-4	<2.0	
Chloroform	67-66-3	<1.0	1,2,3-Trichloropropane	96-18-4	<1.0	
Chloromethane	74-87-3	<5.0	1,2,4-Trimethylbenzene	95-63-6	<1.0	
2-Chlorotoluene	95-49-8	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0	
4-Chlorotoluene	106-43-4	<1.0	Vinyl chloride	75-01-4	<2.0	
Dibromochloromethane	124-48-1	<1.0	Xylenes, Total	1330-20-7	<2.0	
1,2-Dibromoethane	106-93-4	<1.0				
1,2-Dichlorobenzene	95-50-1	<1.0				
1,3-Dichlorobenzene	541-73-1	<1.0				
1,4-Dichlorobenzene	106-46-7	<1.0				
1,1-Dichloroethane	75-34-3	<1.0				
Dichlorodifluoromethane	75-71-8	<2.0				
1,2-Dichloroethane	107-06-2	<1.0				
1,1-Dichloroethene	75-35-4	<0.50				
cis-1,2-Dichloroethene	156-59-2	<0.50				
trans-1,2-Dichloroethene	156-60-5	<0.50				
1,2-Dichloropropane	78-87-5	<1.0				
1,3-Dichloropropane	142-28-9	<1.0				
2,2-Dichloropropane	594-20-7	<1.0				
1,1-Dichloropropene	563-58-6	<1.0				
cis-1,3-Dichloropropene	10061-01-5	<1.0				
trans-1,3-Dichloropropene	10061-02-6	<1.0				
Ethylbenzene	100-41-4	<1.0				
Isopropylbenzene	98-82-8	<1.0				
4-Isopropyltoluene	99-87-6	<1.0				
<u>Surrogate:</u>	% RC	Acceptable % RC	Dilution Factor:	1		
Dibromofluoromethane:	101	64-145 %	Data Qualifiers:	None		
Toluene-d8:	85	59-130 %				
4-Bromofluorobenzene:	80	51-130 %				

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Project #: 2789

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0325151			3/25/2015	3/25/2015	Water
ANALYTE						
Benzene	CAS # 71-43-2	µg/L <0.50	ANALYTE Methyl t-butyl ether (MTBE)	CAS # 1634-04-4	µg/L <1.0	
Bromobenzene	108-86-1	<1.0	Naphthalene	91-20-3	<3.0	
Bromoform	74-97-5	<1.0	n-Propylbenzene	103-65-1	<1.0	
Bromochloromethane	75-27-4	<1.0	Styrene	100-42-5	<1.0	
Bromodichloromethane	75-25-2	<1.0	1,1,2,2-Tetrachloroethane	79-34-5	<1.0	
Bromomethane	74-83-9	<5.0	Tetrachloroethene	127-18-4	<1.0	
n-Butylbenzene	104-51-8	<1.0	Toluene	108-88-3	<1.0	
sec-Butylbenzene	135-98-8	<1.0	1,2,3-Trichlorobenzene	87-61-6	<1.0	
tert-Butylbenzene	98-06-6	<1.0	1,1,1-Trichloroethane	71-55-6	<1.0	
Carbon tetrachloride	56-23-5	<1.0	1,1,2-Trichloroethane	79-00-5	<1.0	
Chlorobenzene	108-90-7	<1.0	Trichloroethene	79-01-6	<1.0	
Chloroethane	75-00-3	<5.0	Trichlorofluoromethane	75-69-4	<2.0	
Chloroform	67-66-3	<1.0	1,2,3-Trichloropropane	96-18-4	<1.0	
Chloromethane	74-87-3	<5.0	1,2,4-Trimethylbenzene	95-63-6	<1.0	
2-Chlorotoluene	95-49-8	<1.0	1,3,5-Trimethylbenzene	108-67-8	<1.0	
4-Chlorotoluene	106-43-4	<1.0	Vinyl chloride	75-01-4	<2.0	
Dibromochloromethane	124-48-1	<1.0	Xylenes, Total	1330-20-7	<2.0	
1,2-Dibromoethane	106-93-4	<1.0				
1,2-Dichlorobenzene	95-50-1	<1.0				
1,3-Dichlorobenzene	541-73-1	<1.0				
1,4-Dichlorobenzene	106-46-7	<1.0				
1,1-Dichloroethane	75-34-3	<1.0				
Dichlorodifluoromethane	75-71-8	<2.0				
1,2-Dichloroethane	107-06-2	<1.0				
1,1-Dichloroethene	75-35-4	<0.50				
cis-1,2-Dichloroethene	156-59-2	<0.50				
trans-1,2-Dichloroethene	156-60-5	<0.50				
1,2-Dichloropropane	78-87-5	<1.0				
1,3-Dichloropropane	142-28-9	<1.0				
2,2-Dichloropropane	594-20-7	<1.0				
1,1-Dichloropropene	563-58-6	<1.0				
cis-1,3-Dichloropropene	10061-01-5	<1.0				
trans-1,3-Dichloropropene	10061-02-6	<1.0				
Ethylbenzene	100-41-4	<1.0				
Isopropylbenzene	98-82-8	<1.0				
4-Isopropyltoluene	99-87-6	<1.0				
<u>Surrogate:</u>	% RC	Acceptable % RC	Dilution Factor:	1		
Dibromofluoromethane:	105	64-145 %	Data Qualifiers:	None		
Toluene-d8:	81	59-130 %				
4-Bromofluorobenzene:	79	51-130 %				

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Lab Reference #: ENT AZ9379
Project Name: Fort Mojave Smoke Shop
Project #: 2789

Volatile Fuel Hydrocarbons (EPA 8015D)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
MW-2	AZ9379-001	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>			<u>Surrogate:</u>	<u>% RC*</u>	
TPH as GROs(C6-C10)	<100			Bromochlorobenzene	109	
<u>Dilution Factor:</u>	1			* Acceptable Recovery: 67-158 %		
<u>Data Qualifiers:</u>	None					
MW-3	AZ9379-002	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>			<u>Surrogate:</u>	<u>% RC*</u>	
TPH as GROs(C6-C10)	<100			Bromochlorobenzene	107	
<u>Dilution Factor:</u>	1			* Acceptable Recovery: 67-158 %		
<u>Data Qualifiers:</u>	None					
MW-4	AZ9379-003	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>			<u>Surrogate:</u>	<u>% RC*</u>	
TPH as GROs(C6-C10)	<100			Bromochlorobenzene	90	
<u>Dilution Factor:</u>	1			* Acceptable Recovery: 67-158 %		
<u>Data Qualifiers:</u>	None					
MW-6	AZ9379-004	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>			<u>Surrogate:</u>	<u>% RC*</u>	
TPH as GROs(C6-C10)	<100			Bromochlorobenzene	100	
<u>Dilution Factor:</u>	1			* Acceptable Recovery: 67-158 %		
<u>Data Qualifiers:</u>	None					
MW-7	AZ9379-005	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>			<u>Surrogate:</u>	<u>% RC*</u>	
TPH as GROs(C6-C10)	<100			Bromochlorobenzene	110	
<u>Dilution Factor:</u>	1			* Acceptable Recovery: 67-158 %		
<u>Data Qualifiers:</u>	None					

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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Phoenix, AZ, 85034

Lab Reference #: ENT AZ9379
Project Name: Fort Mojave Smoke Shop
Project #: 2789

Volatile Fuel Hydrocarbons (EPA 8015D)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
MW-5	AZ9379-006	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>	<u>Surrogate:</u>			<u>% RC*</u>	
TPH as GROs(C6-C10)	<100	Bromochlorobenzene			115	
<u>Dilution Factor:</u> 1		* Acceptable Recovery: 67-158 %				
<u>Data Qualifiers:</u> None						
MW-1	AZ9379-007	3/19/2015	3/18/2015	3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>	<u>Surrogate:</u>			<u>% RC*</u>	
TPH as GROs(C6-C10)	11000	Bromochlorobenzene			109	
<u>Dilution Factor:</u> 100		* Acceptable Recovery: 67-158 %				
<u>Data Qualifiers:</u> D2,						
Method Blank	MBMT0323151			3/23/2015	3/23/2015	Water
<u>ANALYTE</u>	<u>µg/L</u>	<u>Surrogate:</u>			<u>% RC*</u>	
TPH as GROs(C4-C12)	<100	Bromochlorobenzene			109	
<u>Dilution Factor:</u> 1		* Acceptable Recovery: 67-158 %				
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
 Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 3/24/2015

Date of Analysis: 3/24/2015

Dup Date of Analysis: 3/24/2015

Laboratory Sample #: 19907-008

MS/MSD Qualifiers: None

Reference #: ENT AZ9379

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloroethene	0.00	10.0	6.80	6.60	68	66	3	51-133	20	<input type="checkbox"/>
Benzene	0.00	10.0	9.80	9.50	98	95	3	60-132	20	<input type="checkbox"/>
Trichloroethene	0.00	10.0	10.3	9.80	103	98	5	59-138	20	<input type="checkbox"/>
Toluene	0.00	10.0	9.70	9.50	97	95	2	58-130	21	<input type="checkbox"/>
Chlorobenzene	0.00	10.0	10.3	10.1	103	101	2	67-130	20	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Dibromofluoromethane	87	88	<input type="checkbox"/>
Toluene-d8	70	71	<input type="checkbox"/>
4-Bromofluorobenzene	68	69	<input type="checkbox"/>

LCS	LCSD	Qual
90	89	<input type="checkbox"/>
75	74	<input type="checkbox"/>
72	72	<input type="checkbox"/>

ACP % RC
64-145
59-130
51-130

Laboratory Control Sample

Date of Extraction: 3/24/2015

Date of Analysis: 3/24/2015

Dup Date of Analysis: 3/24/2015

Laboratory Sample #: HT0324151

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
1,1-Dichloroethene	10.0	6.00	6.40	60	64	6	54-138	20	<input type="checkbox"/>
Benzene	10.0	8.50	9.40	85	94	10	61-138	20	<input type="checkbox"/>
Trichloroethene	10.0	8.90	9.60	89	96	8	64-141	20	<input type="checkbox"/>
Toluene	10.0	8.70	9.50	87	95	9	60-130	20	<input type="checkbox"/>
Chlorobenzene	10.0	9.00	10.0	90	100	11	64-132	20	<input type="checkbox"/>

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
 Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 3/25/2015

Date of Analysis: 3/25/2015

Dup Date of Analysis: 3/25/2015

Laboratory Sample #: AZ9379-005

MS/MSD Qualifiers: None

Reference #: ENT AZ9379

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloroethene	0.00	10.0	5.90	5.40	59	54	9	51-133	20	<input type="checkbox"/>
Benzene	0.00	10.0	9.10	8.60	91	86	6	60-132	20	<input type="checkbox"/>
Trichloroethene	0.00	10.0	9.20	8.60	92	86	7	59-138	20	<input type="checkbox"/>
Toluene	0.00	10.0	8.90	8.30	89	83	7	58-130	21	<input type="checkbox"/>
Chlorobenzene	0.00	10.0	9.50	9.20	95	92	3	67-130	20	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Dibromofluoromethane	105	105	<input type="checkbox"/>
Toluene-d8	78	80	<input type="checkbox"/>
4-Bromofluorobenzene	78	77	<input type="checkbox"/>

LCS	LCSD	Qual
103	102	<input type="checkbox"/>
80	80	<input type="checkbox"/>
78	77	<input type="checkbox"/>

ACP % RC
64-145
59-130
51-130

Laboratory Control Sample

Date of Extraction: 3/25/2015

Date of Analysis: 3/25/2015

Dup Date of Analysis: 3/25/2015

Laboratory Sample #: HT0325151

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
1,1-Dichloroethene	10.0	5.70	6.10	57	61	7	54-138	20	<input type="checkbox"/>
Benzene	10.0	7.90	8.70	79	87	10	61-138	20	<input type="checkbox"/>
Trichloroethene	10.0	8.30	9.00	83	90	8	64-141	20	<input type="checkbox"/>
Toluene	10.0	7.80	8.40	78	84	7	60-130	20	<input type="checkbox"/>
Chlorobenzene	10.0	8.10	8.80	81	88	8	64-132	20	<input type="checkbox"/>

**QA/QC Report
for
Volatile Fuel Hydrocarbons (EPA 8015D)**
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 3/23/2015

Date of Analysis: 3/23/2015

Dup Date of Analysis: 3/23/2015

Laboratory Sample #: AZ9379-001

MS/MSD Qualifiers: None

Reference #: ENT AZ9379

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.0	1000	1000	940	100	94	6	70-130	20	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Bromochlorobenzene	141	146	<input type="checkbox"/>	128	128	<input type="checkbox"/>	67-158

Laboratory Control Sample

Date of Extraction: 3/23/2015

Date of Analysis: 3/23/2015

Dup Date of Analysis: 3/23/2015

Laboratory Sample #: MT0323151

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	1000	1000	1000	100	100	0	70-130	20	<input type="checkbox"/>

Data Qualifier Definitions

Qualifier

D2 = Sample required dilution due to high concentration of target analyte.

Definition of terms:

R1	Results Of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
%MS	Percent Recovery Of MS: $\{(MS-R1) / SP\} \times 100$
%MSD	Percent Recovery Of MSD: $\{(MSD-R1) / SP\} \times 100$
RPD	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample Results
LCSD	Laboratory Control Sample Duplicate Results
%LCS	Percent Recovery Of LCS: $\{(LCS-R1) / SP\} \times 100$
%LCSD	Percent Recovery Of LCSD: $\{(LCSD-R1) / SP\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %MS(MSD)	Acceptable Range of Percent
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was required for this analyte; see attached explanation.
ND	Analyte Not Detected

Analysis Request and Chain of Custody Record



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(480) 736-0960 Fax (480) 736-0970

Lab Job No: A29379

Page 1 of 1

REQUIRED TURN AROUND TIME: Standard:

72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATIVE 1/25/15 82623 GRO 8015	REMARKS/PRECAUTIONS		
COMPANY:	Environmental Technology Zrc	PROJECT NAME: Fort Mojave Smoke Shop								
SEND REPORT TO:	Carney Miller	NUMBER: 2789								
EMAIL:	cmiller@en-tech-us.com	ADDRESS:								
ADDRESS:	Labs@en-tech-us.com									
PHONE:	602-267-1900	P.O #:								
FAX:	602-267-1973	SAMPLED BY: Carney D Miller								
SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE					
MW-2	4	3/19/15	1155	GW	VOA	X X		No TICs -001		
MW-3			1300			X X		-002		
MW-4			1355			X Y		-003		
MW-6			1455			X Y		-004		
MW-7			1550			X Y		-005		
MW-5			1645			X X		-006		
MW-1			1735			X X		-007		
Tray blank	2	—	—	H ₂ O		X+II		-008		
								—II		
Total No. of Samples:	Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO ₃ 4 = H ₂ SO ₄ 5 = NaOH 6 = Other							

Relinquished By: 	Date/Time: 3/19/15 1057	Received By: OC A AZ 	Date/Time: 3/19/15 1057	Sample Matrix: WW - Wastewater
Relinquished By:	Date/Time:	Received By:	Date/Time:	DW - Drinking Water SS - Soil/Solid GW - Groundwater OT- Other
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:	Sample Integrity: Intact _____ On Ice <input checked="" type="checkbox"/> 3.6 °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, with Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup sample.

APPENDIX B. Field Parameter Measurements

Groundwater Sampling Field Sheet

Well ID: MW-2
DTP:
DTW (w/o tubing): 18.23
DTW (w/tubing) 18.22
Start Time: 1120
Sample Time: 1155

Date:	3/18/2015
Project No:	2789
Field Tech:	C Miller
Purge Order:	1
Well Dia:	4"
Well TD:	36.30

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196
Initial Tubing Volume to be Purged:						
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes
270		0.049		16.387		1

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1120	~50%	300	18.22	--	--	--	--	--	--	0
1125	~50%	300	18.22	0.70	238	0.22	1177	6.81	24.57	1.50
1130	~50%	300	18.23	0.52	232	0.37	1177	6.83	24.58	1.50
1135	~50%	300	18.24	0.55	226	0.37	1177	6.84	24.60	1.50
1140	~50%	300	18.24	0.58	223	0.25	1181	6.85	24.54	1.50
1145	~50%	300	18.24	0.55	218	0.21	1182	6.87	24.54	1.50
1150	~50%	300	18.23	0.56	215	0.25	1183	6.87	24.58	1.50
									Total Purge Volume	9.00
Stabilization Criteria			<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%	

Notes: Equipment used: GeoPump II, YSI 556 MPS, LaMotte 2020 Turbidimeter, Solinst 122 IP

Samples collected with pump running and prior to entering flow through cell

Groundwater Sampling Field Sheet

Well ID:	MW-3	Date:	3/18/2015
DTP:		Project No:	2789
DTW (w/o tubing):	17.85	Field Tech:	C Miller
DTW (w/tubing)	17.84	Purge Order:	2
Start Time:	1220	Well Dia:	4"
Sample Time:	1300	Well TD:	36.60

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196		
Initial Tubing Volume to be Purged:								
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes		
270		0.049		16.387		1		217

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1220	~50%	300	17.84	--	--	--	--	--	--	0
1225	~50%	300	17.84	0.72	215	0.00	1310	6.82	24.95	1.50
1230	~50%	300	17.84	0.71	212	0.00	1312	6.81	24.93	1.50
1235	~50%	300	17.85	0.66	209	0.00	1311	6.82	24.98	1.50
1240	~50%	300	17.85	0.61	206	0.00	1311	6.83	24.97	1.50
1245	~50%	300	17.85	0.58	204	0.00	1312	6.83	24.94	1.50
1250	~50%	300	17.85	0.61	203	0.00	1312	6.83	25.03	1.50
1255	~50%	300	17.85	0.62	202	0.00	1313	6.84	25.07	1.50
										Total Purge Volume
										10.50
Stabilization Criteria			<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%	

Notes: _____

Groundwater Sampling Field Sheet

Well ID:	MW-4
DTP:	
DTW (w/o tubing):	18.00
DTW (w/tubing)	17.99
Start Time:	1325
Sample Time:	1355

Date:	3/18/2015
Project No:	2789
Field Tech:	C Miller
Purge Order:	3
Well Dia:	4"
Well TD:	37.65

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196
Initial Tubing Volume to be Purged:						
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes
270		0.049		16.387		1

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1325	~50%	300	17.99	--	--	--	--	--	--	0
1330	~50%	300	18.00	0.37	198	0.00	2163	6.74	25.54	1.50
1335	~50%	300	17.99	0.33	195	0.00	2165	6.73	25.55	1.50
1340	~50%	300	18.00	0.32	193	0.00	2166	6.74	25.45	1.50
1345	~50%	300	18.00	0.32	191	0.00	2166	6.75	25.46	1.50
1350	~75%	500	18.00	0.31	190	0.00	2167	6.74	25.39	2.50
									Total Purge Volume	8.50
Stabilization Criteria			<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%	

Notes:

Groundwater Sampling Field Sheet

Well ID: MW-6
DTP:
DTW (w/o tubing): 16.71
DTW (w/tubing) 16.70
Start Time: 1420
Sample Time: 1455

Date:	3/18/2015
Project No:	2789
Field Tech:	C Miller
Purge Order:	4
Well Dia:	4"
Well TD:	36.50

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196	
Initial Tubing Volume to be Purged:							
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes	Total ml
270		0.049		16.387		1	

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1420	~50%	300	16.70	--	--	--	--	--	--	
1425	~50%	300	16.71	0.69	183	0.59	1781	6.93	25.42	1.50
1430	~50%	300	16.71	0.41	179	0.34	1771	6.93	25.39	1.50
1435	~50%	300	16.71	0.31	177	0.20	1771	6.93	25.40	1.50
1440	~50%	300	16.71	0.26	174	0.00	1765	6.92	25.38	1.50
1445	~50%	300	16.71	0.26	170	0.00	1766	6.92	25.43	1.50
1450	~50%	300	16.71	0.26	168	0.00	1766	6.93	25.41	1.50
									Total Purge Volume	9.00
Stabilization Criteria			<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%	

Notes:

Groundwater Sampling Field Sheet

Well ID: MW-7
DTP:
DTW (w/o tubing): 16.98
DTW (w/tubing) 16.97
Start Time: 1515
Sample Time: 1550

Date:	3/18/2015
Project No:	2789
Field Tech:	C Miller
Purge Order:	5
Well Dia:	4"
Well TD:	38.00

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196
Initial Tubing Volume to be Purged:						
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes
270		0.049		16.387		1

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1515	~50%	300	16.97	--	--	--	--	--	--	0
1520	~50%	300	16.97	0.39	166	0.27	1851	6.86	26.61	1.50
1525	~50%	300	16.98	0.33	163	0.00	1851	6.85	26.55	1.50
1530	~50%	300	16.98	0.30	162	0.00	1849	6.86	26.56	1.50
1535	~50%	300	16.98	0.27	160	0.00	1848	6.86	26.57	1.50
1540	~50%	300	16.98	0.27	159	0.00	1845	6.86	26.47	1.50
									Total Purge Volume	7.50
Stabilization Criteria		<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%		

Notes: _____

Groundwater Sampling Field Sheet

Well ID:	MW-5	Date:	3/18/2015
DTP:		Project No:	2789
DTW (w/o tubing):	17.64	Field Tech:	C Miller
DTW (w/tubing)	17.63	Purge Order:	6
Start Time:	1605	Well Dia:	4"
Sample Time:	1645	Well TD:	37.15

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196		
Initial Tubing Volume to be Purged:								
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes		
270		0.049		16.387		1		217

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1605	~50%	300	17.63	--	--	--	--	--	--	0
1610	~50%	300	17.63	0.42	91	9.36	1498	6.95	25.78	1.50
1615	~50%	300	17.64	0.31	85	9.25	1494	6.94	25.77	1.50
1620	~50%	300	17.64	0.25	81	9.48	1491	6.94	25.74	1.50
1625	~50%	300	17.64	0.24	72	8.67	1490	6.94	25.76	1.50
1630	~50%	300	17.64	0.25	63	8.77	1489	6.94	25.76	1.50
1635	~50%	300	17.64	0.22	62	8.68	1487	6.95	25.77	1.50
1640	~50%	300	17.64	0.22	61	8.66	1488	6.94	25.76	1.50
										Total Purge Volume
										10.50
										Stabilization Criteria
				<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%

Notes: Water appeared to be clear, no color

Groundwater Sampling Field Sheet

Well ID:	MW-1
DTP:	
DTW (w/o tubing):	17.82
DTW (w/tubing)	17.81
Start Time:	1700
Sample Time:	1735

Date:	3/18/2015
Project No:	2789
Field Tech:	C Miller
Purge Order:	7
Well Dia:	4"
Well TD:	36.55

Tubing Diameter Constants:	1/4 inch	0.049	3/8 inch	0.11	1/2 inch	0.196
Initial Tubing Volume to be Purged:						
Length (in)	x	Constant	x	ml / ci	x	Purge Volumes
270		0.049		16.387		1

Purge Parameters

Time	Pump Setting	Purging Rate ml/min	DTW	DO mg/L	ORP (mv)	Turb (NTU)	Cond (S/cm)	pH	Temp (°C)	Volume Purged Liters
1700	~50%	300	17.81	--	--	--	--	--	--	0
1705	~50%	300	17.82	0.29	-185	0.00	1322	6.91	26.23	1.50
1710	~50%	300	17.82	0.15	-180	0.00	1319	6.92	26.19	1.50
1715	~50%	300	17.82	0.15	-170	0.00	1322	6.99	26.17	1.50
1720	~50%	300	17.82	0.18	-154	0.00	1321	7.04	26.17	1.50
1725	~50%	300	17.82	0.20	-148	0.00	1321	7.07	26.14	1.50
1730	~50%	300	17.82	0.20	-146	0.00	1321	7.07	26.12	1.50
									Total Purge Volume	9.00
Stabilization Criteria			<0.33'	0.3 mg/l	10 mv	10%	3%	0.1	3%	

Notes: Petroleum odor

APPENDIX C. Summary of Groundwater Monitoring Data

Appendix C. Summary of Groundwater Monitoring Data

Well ID	Date	SE	DTW	DTP	CDTW	GWE	GRO	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	MTBE	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes
MW-1	10/28/13	482.53	16.73	16.69	16.70	465.83												
	11/11/13	482.53	16.84	16.81	16.82	465.71												
	12/09/13	482.53	17.23			465.30												
	12/18/13	482.53	17.32	17.27	17.28	465.25												
	01/07/14	482.53	17.50			465.03												
	01/08/14	482.53	17.53			465.00												
	02/26/14	482.53	17.73			464.80												
	03/19/14	482.53	17.52			465.01	32,000	1,400	<100	<100	1,100	100	<100	<300	7,900	720	220	4,100
	04/10/14	482.53	17.56			464.97		720	<100	<100	480	<100	<100	<300	2,600	390	100	1,200
	05/14/14	482.53	17.57			464.96												
	06/12/14	482.53	17.65			464.88	25,000	1,800	<100	<100	1,100	110	<100	<300	5,600	680	220	2,000
	07/22/14	482.53	17.04			465.49												
	08/13/14	482.53	16.88			465.65												
	09/15/14	482.53	16.70			465.83	33,000	2,200	<200	<200	1,100	<200	<200	<600	8,600	560	210	2,000
	10/28/14	482.53	17.49			465.04												
	11/21/14	482.53	17.69			464.84												
	12/22/14	482.53	17.99			464.54	25,000	3,200	<200	<200	1,600	<200	<200	<600	8,900	420	<200	2,100
	01/26/15	482.53	18.11			464.42												
	02/19/15	482.53	18.15			464.38												
	03/18/15	482.53	17.82			464.71	11,000	700	<100	<100	330	<100	<100	<300	2,300	120	110	700
MW-2	10/28/13	482.96	17.01			465.95	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	1.00	<1.0	<1.0	<2.0
	11/11/13	482.96	17.24			465.72												
	12/09/13	482.96	17.63			465.33												
	12/18/13	482.96	17.71			465.25	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/07/14	482.96	17.90			465.06												

SE is surveyed elevation in feet above mean sea level.

DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

All analytical values reported in micrograms per liter.

Bolded and italicized values exceed method reporting limits.

Bolded and shaded values exceed regulatory standards

Appendix C. Summary of Groundwater Monitoring Data

Well ID	Date	SE	DTW	DTP	CDTW	GWE	GRO	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	MTBE	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes
	01/08/14	482.96	17.93			465.03												
	02/26/14	482.96	18.12			464.84												
	03/19/14	482.96	17.93			465.03	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	04/10/14	482.96	17.97			464.99												
	05/14/14	482.96	17.99			464.97												
	06/12/14	482.96	18.03			464.93	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	07/22/14	482.96	17.44			465.52												
	08/13/14	482.96	17.28			465.68												
	09/15/14	482.96	17.11			465.85	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	10/28/14	482.96	17.91			465.05												
	11/21/14	482.96	18.11			464.85												
	12/22/14	482.96	18.39			464.57	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/26/15	482.96	18.52			464.44												
	02/19/15	482.96	18.57			464.39												
	03/18/15	482.96	18.23			464.73	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
MW-3	10/28/13	482.58	16.59			465.99	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	11/11/13	482.58	16.84			465.74												
	12/09/13	482.58	17.24			465.34												
	12/18/13	482.58	17.32			465.26	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/07/14	482.58	17.53			465.05												
	01/08/14	482.58	17.55			465.03												
	02/26/14	482.58	17.76			464.82												
	03/19/14	482.58	17.54			465.04	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	04/10/14	482.58	17.58			465.00												
	05/14/14	482.58	17.59			464.99												

SE is surveyed elevation in feet above mean sea level.

DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

All analytical values reported in micrograms per liter.

Bolded and italicized values exceed method reporting limits.

Bolded and shaded values exceed regulatory standards

Appendix C. Summary of Groundwater Monitoring Data

Well ID	Date	SE	DTW	DTP	CDTW	GWE	GRO	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	MTBE	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes
	06/12/14	482.58	17.67			464.91	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	07/22/14	482.58	17.06			465.52												
	08/13/14	482.58	16.90			465.68												
	09/15/14	482.58	16.69			465.89	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	10/28/14	482.58	17.51			465.07												
	11/21/14	482.58	17.72			464.86												
	12/22/14	482.58	18.01			464.57	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/26/15	482.58	18.14			464.44												
	02/19/15	482.58	18.19			464.39												
	03/18/15	482.58	17.85			464.73	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
MW-4	10/28/13	482.69	16.72			465.97	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	11/11/13	482.69	16.98			465.71												
	12/09/13	482.69	17.38			465.31												
	12/18/13	482.69	17.46			465.23	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/07/14	482.69	17.67			465.02												
	01/08/14	482.69	17.70			464.99												
	02/26/14	482.69	17.91			464.78												
	03/19/14	482.69	17.69			465.00	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	04/10/14	482.69	17.73			464.96												
	05/14/14	482.69	17.74			464.95												
	06/12/14	482.69	17.83			464.86	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	07/22/14	482.69	17.23			465.46												
	08/13/14	482.69	17.06			465.63												
	09/15/14	482.69	16.84			465.85	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	10/28/14	482.69	17.66			465.03												

SE is surveyed elevation in feet above mean sea level.

DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

All analytical values reported in micrograms per liter.

Bolded and italicized values exceed method reporting limits.

Bolded and shaded values exceed regulatory standards

Appendix C. Summary of Groundwater Monitoring Data

Well ID	Date	SE	DTW	DTP	CDTW	GWE	GRO	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	MTBE	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes
	11/21/14	482.69	17.87			464.82												
	12/22/14	482.69	18.16			464.53	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	
	01/26/15	482.69	18.29			464.40												
	02/19/15	482.69	18.34			464.35												
	03/18/15	482.69	18.00			464.69	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	
MW-5	10/28/13	482.33	16.41			465.92	250	49	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	1.24	<1.0	<1.0	7.60
	11/11/13	482.33	16.66			465.67												
	12/09/13	482.33	17.04			465.29												
	12/18/13	482.33	17.11			465.22	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	
	01/07/14	482.33	17.31			465.02												
	01/08/14	482.33	17.33			465.00												
	02/26/14	482.33	17.54			464.79												
	03/19/14	482.33	17.34			464.99	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	
	04/10/14	482.33	17.39			464.94		<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	
	05/14/14	482.33	17.42			464.91												
	06/12/14	482.33	17.48			464.85	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	
	07/22/14	482.33	16.88			465.45												
	08/13/14	482.33	16.72			465.61												
	09/15/14	482.33	16.55			465.78	170	22	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	3.50	1.50	90
	10/28/14	482.33	17.34			464.99												
	11/21/14	482.33	17.52			464.81												
	12/22/14	482.33	17.81			464.52	2,100	570	<20	<20	290	<20	<20	<60	<20	140	32	370
	01/26/15	482.33	17.93			464.40												
	02/19/15	482.33	17.98			464.35												
	03/18/15	482.33	17.64			464.69	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	

SE is surveyed elevation in feet above mean sea level.

DTW is depth-to-water in feet.

DTP is depth-to-product in feet.

PT is product thickness in feet.

CDTW is corrected depth-to-water. CDTW = DTW - SG * PT

SG is specific gravity of product.

GWE is groundwater elevation. GWE = SE - DTW or SE - CDTW

All analytical values reported in micrograms per liter.

Bolded and italicized values exceed method reporting limits.

Bolded and shaded values exceed regulatory standards

Appendix C. Summary of Groundwater Monitoring Data

Well ID	Date	SE	DTW	DTP	CDTW	GWE	GRO	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	MTBE	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes
MW-6	12/18/13	481.38	16.18			465.20	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/07/14	481.38	16.39			464.99												
	01/08/14	481.38	16.42			464.96												
	02/26/14	481.38	16.61			464.77												
	03/19/14	481.38	16.41			464.97	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	04/10/14	481.38	16.47			464.91												
	05/14/14	481.38	16.50			464.88												
	06/12/14	481.38	16.57			464.81	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	07/22/14	481.38	15.96			465.42												
	08/13/14	481.38	15.80			465.58												
	09/15/14	481.38	15.65			465.73	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	10/28/14	481.38	16.43			464.95												
	11/21/14	481.38	16.60			464.78												
	12/22/14	481.38	16.88			464.50	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/26/15	481.38	16.99			464.39												
	02/19/15	481.38	17.05			464.33												
	03/18/15	481.38	16.71			464.67	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
MW-7	12/18/13	481.68	16.46			465.22	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/07/14	481.68	16.66			465.02												
	01/08/14	481.68	16.69			464.99												
	02/26/14	481.68	16.87			464.81												
	03/19/14	481.68	16.69			464.99	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	04/10/14	481.68	16.74			464.94												
	05/14/14	481.68	16.78			464.90												
	06/12/14	481.68	16.82			464.86	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0

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Well ID	Date	SE	DTW	DTP	CDTW	GWE	GRO	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	MTBE	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes
	07/22/14	481.68	16.21			465.47												
	08/13/14	481.68	16.07			465.61												
	09/15/14	481.68	15.94			465.74	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	10/28/14	481.68	16.71			464.97												
	11/21/14	481.68	16.88			464.80												
	12/22/14	481.68	17.16			464.52	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0
	01/26/15	481.68	17.27			464.41												
	02/19/15	481.68	17.32			464.36												
	03/18/15	481.68	16.98			464.70	<100	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<2.0

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Appendix C.
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